

**A STRATEGIC FRAMEWORK FOR MANAGING
TRANSFORMATIONAL CHANGE TOWARDS
SUSTAINABILITY IN THE ABU DHABI PUBLIC
SECTOR ORGANISATION**

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A STRATEGIC FRAMEWORK FOR MANAGING TRANSFORMATIONAL CHANGE TOWARDS SUSTAINABILITY IN THE ABU DHABI PUBLIC SECTOR ORGANISATION

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**A thesis submitted in partial fulfilment of the requirements of the University of
Wolverhampton for the degree of Doctor of Philosophy (PhD)**

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DEDICATION

This thesis is dedicated to the memory of my late father Mr Mohammed Zaher Al Shibli, my mother Um Ahmed, my wife, my sons, daughters, sisters and brothers.

ABSTRACT

Fear of global, social and environmental catastrophes has led to most developed and developing economies to embrace sustainability as a desirable public policy goal. Therefore, the Abu Dhabi government has made public commitments to transform along a more sustainable trajectory and assigned the public sector the collective responsibility of leading this transformation. Henceforth, public sector organisations have to embrace sustainable practices, re-orient their activities to achieve wider societal sustainable outcomes and govern others to act more sustainably. However, little is known about how public sector organisations are responding to this encouragement in the Abu Dhabi. The aim of this research is to explore how Abu Dhabi public sector organisation is embedding sustainability strategies for improved competitiveness. Given the relatively new and unexplored nature of the research problem, qualitative research method was adopted to collect and analyse data. Semi-structured interviews with 60 professionals were used to collect data which was then analysed using content analysis for inference and conclusion.

The study concluded that the concept of sustainability is perceived as a distinct concept. It suggests that an organisation wide awareness-raising training programme on the concept of sustainability needs to be developed and deployed. Also, there is a need for cross-sector collaboration to capture and share best and worst practices related to transformative change towards sustainability. The lack of leadership skills for successful deployment of sustainability initiatives is one of the most important challenges for organisation. Therefore, there is an urgent need to develop and deliver a bespoke training framework to address, improve and measure the effectiveness of leadership skills for driving change towards sustainability. Green technology has enormous potential to enable Abu Dhabi public sector organisation to meet its sustainability goals. It is recommended that future research on mobile applications for sustainability should focus on user readiness aspects, as well as organisation readiness for adoption and usage patterns of mobile devices. Overall, it is evident from the empirical findings that the outlook of improved sustainability initiatives efforts from the Abu Dhabi public sector organisation is quite promising at present. A strategic framework for transformative change towards sustainability was developed and validated. It is recommended to explore the level of embeddedness of sustainability initiatives in the public sector between developed and developing countries. This should lead to a generation of benchmark data and best practices in addressing global sustainability issues.

CHAPTER 1 : AN INTRODUCTION TO THE STUDY

This opening chapter discusses the background and justification for managing transformational change associated with sustainability initiatives for improved competitiveness. It also presents the research aim, objectives, and research questions. Furthermore, it highlights potential benefits of this current research. Finally, it presents the structure of the thesis.

1.1 BACKGROUND TO THE RESEARCH STUDY

In the early part of the twenty-first century, there is little doubt that the world is at a crossroad. The world is changing very rapidly in many different and unpredictable ways, and this change might intensify in future. Some anticipated future changes are listed by Gupta and Sanchez (2012) include:

- By 2050, the global population may be 9 billion, consuming at higher rates, living mostly (75%) in urban areas, often with high migration to other parts of the world, lead to the rise of new multi-ethnic societies with different value systems. These trends may be affected by climate change, natural disasters, wars or pandemics, as well as major social transitions.
- Despite the recent economic crisis, global world output is expected to increase by as much as three times by 2050, by which time 19 of the top 30 economies will be from the current group of emerging economies.
- Poverty and income inequality will continue to increase, in developed as well as developing countries.
- Partners in international trade will change, associated with increasing trade in services via cyberspace, outsourcing of employment to the changing cheapest economies and to automated systems, with increasing demand for skills and education in the workplace.
- Technological changes, including development of eco-, nano-, bio- and information-technologies, are expected to dramatically change the way we live. The rapid expansion in use of the internet and gadgets (such as mobile devices) will continue

to transform the way we communicate and may even influence the rise and fall of governments, while knowledge may no longer be filtered for its accuracy, secrets may leak, intellectual property rights may be disrespected, and cybercrime and espionage may increase.

- The rising population, growing life expectancy, technological developments and increased income may result in a significant increase in energy use and mineral extraction (especially copper, aluminium, rare metals, and platinum). Furthermore, there may be substantial increases in water withdrawals and pollution. Global temperatures may rise by 1.5–2 °C above pre-industrial values by 2050.
- To meet the increasing global food demand, an additional 10 – 20% of land may be converted to agriculture, transforming habitats, increasing nutrient loading, reducing edible fish populations by 90% in comparison to pre-industrial levels, and reducing plant species richness by 10–15%.
- Economic power may shift to the BRIC countries (Brazil, Russia, India and China), and military power to China. These countries may shape the principles of governance at the global level, and may question the current vision of democracy. A change in value systems may occur as these countries take on a more dominant role in global politics.
- The global market for clean energy and energy efficiency investment opportunities will triple to US\$2.2 trillion by 2020 (Robins et al., 2010). This increase will be led by hybrid and full electric vehicles, China's growing clean energy market and the need for capital investment in new green technologies.

The revolutionary changes in the transport system have vastly increased capacity for travel and trade most notably during the industrial revolution with the construction of railways. It was also the first step towards fossil fuel dependency which afflicts the world today evident by the fact at present 80% of all primary energy is derived from fossil fuel (Höök and Tang, 2013). This has culminated to 31 billion tons of carbon dioxide emissions in 2010 (U.S. Energy Information Administration, 2013) and in 2013 it was announced Carbon Dioxide (CO₂) had exceeded 400 parts per million, the highest concentration of carbon for hundreds of thousands of years. The excessive

amount of greenhouse gasses notably CO₂ emitted into the atmosphere has caused the Earth's average surface temperature to increase by 1.2°C over the past 100 years with close to 0.6°C occurring in the previous 30 years (Committee of America's Climate Choices, 2011). The increase of temperature has caused melting of glaciers, sea ice and permafrost resulting in rise of sea levels, flooding and change in precipitation. There has also been an increase of extreme weather outbreaks such as drought, heat waves, forest and wild fires (Wang and Chameides, 2005). The primary sufferers of global warming would be in regions such as Asia, Africa and South America however if global warming continues at the same rate this would result in dramatic change to many species including humans through changes to agriculture, livestock and habitat which reverberate across the world (Fourth IPPC Report, 2007).

1.2 JUSTIFICATION FOR THE STUDY

Today, organisations can succeed only if they are genuinely 'value-led' and adopt a holistic rather than a silo approach to social, economic and environmental issues. As noted by Drucker (2002), 'every single pressing social and global issue of our time is a business opportunity'. The above statement clearly conveys that organisations that successfully embrace the sustainability agenda and integrate it into their daily business operations will thrive. While sustainability is becoming acknowledged as a business imperative, there is little cohesive guidance as to either how managers and leaders can identify the best focus for sustainability practices in their businesses or how they can best embed them or indeed, how they can identify what it really means for them as unique organisations.

Brundtland (1987) defined sustainable development or sustainability 'as a development that meets present needs without compromising the ability of future generations to meet their own needs'. Looking at each element separately, 'sustainability' means the capacity for an activity to be carried on indefinitely into the future, given the amount and type of resources available, whereas 'development' implies that society will change or grow in the same way. Hence, 'sustainability' suggests change and improvement that is compatible with environmental, social and other limits, both now and in the long-term future (Gray and Wiedemann, 1999). Neubaum et al. (2009) argue that sustainability in business management requires a firm's environmental and social responsibilities to be given the same weight as its economic concerns. This approach

helps reshape the rules of competition, leads to new business models, and redefines and restructures market sectors, creating at the same time, risks and opportunities (Deloitte, 2011).

Porter and Kramer (2011) noted that organisations continue to view value creation narrowly, optimising short-term financial performance in a bubble while missing the most important customer needs and ignoring the broader influences that determine their longer-term success. For instance, the 2010 United Nations Global Compact- Accenture CEO study found that 93% of CEOs believe sustainability will be critical to the future success of their companies. A critical mass of business leaders, 80%, believe a tipping point will be reached within the next 15 years where sustainability is embedded in the core business and strategies of most companies, and 54% believe this tipping point could be reached within the next 10 years. Further evidence for this increased awareness is supplied by a recent Accenture global survey (2013) revealed that 63% of CEOs expect sustainability to transform their industry within five years and 76% believe that embedding sustainability strategy into core business will drive revenue growth and new opportunities. Although many companies recognise the value of a sustainability strategy, most have not yet incorporated sustainability issues into their overall business strategy.

But even as they make progress in embedding sustainability through their business, it is becoming increasingly apparent that organisations are constrained by market expectations, and are struggling to quantify and capture the business value of sustainability. In the process, trade-offs between sustainability and economic competitiveness are debated (Kleindorfer, Singhal, and Van Wassenhove, 2005). However, a number of authors in the field have challenged this view and insist that trade-offs are inevitable in the process of pursuing and maintaining sustainable competitive advantages (Porter, 1991; Porter and Reinhardt (2007); Porter and Kramer, 2011).

A research study by Kay (2004) on several public sector organisations suggests that though the resource-based view and triple bottom line approaches are central to the notion of competitive advantage in private firms, they only apply to public sector organisations where competition exists. This is mainly because public firms are funded

by the government for public service and frequently do not need to compete with other organisations when offering a similar set of services to the public (Prajogo et al, 2012).

Many public sector organisations are occupied with the implementation of sustainability-related change initiatives. Underlying these changes is a managerial logic which implies that public sector organisations should be more based on business-like values, rather than bureaucratic principals (Wise, 2000). These changes are aimed at making public sector organisations more efficient, cost-effective and community oriented (Kickert, 2000).

It is commonly agreed among scholars from diverse disciplines in the field that organisational success or failure depends upon the ability to cope with the environment (Wang and Ahmed, 2007; Davis and Brady, 2000). If organisations do not adjust to the changes that occur in the environment and change quickly and efficiently they risk competitiveness and survival (Chedbrough, 2010; Rerup and Feldman, 2011).

Change management has been in existence for many years in varied forms (Dicke, 2007; Burkes, 2011). Researchers argue that it has been in existence from the early 19th century, when US factories started to change from focusing more on sales, distribution and lean structures to employing more individuals, and having more layers within an organisation (Townsend et al, 1998). The late 19th century brought on many more changes with more migrating populations and different individuals to be managed. All these required change management in varying forms. The late 1990's brought even more challenges to organisations with the rise of globalisation and competition. As a result, organisations responded with various strategies such as downsizing, realignment, outsourcing and joint ventures – and all these required change management on a much larger scale (Schutte, 1997; Ogilvie and Stork, 2003; Holbede, 2012).

Change management is even more important, nowadays, where rapid globalisation, widespread economic crisis, and unprecedented change at the international geo-political landscape coupled with the relentless advancements of technology have made the need for organisational change an inseparable part of organisational life and management practice (Lin and Liu, 2012). Organisations private and public alike operate in an environment that lacks equilibrium, and change is becoming increasingly multifaceted, with no or very little hope, of being forecasted. In such chaotic conditions,

organisations with long-standing hierarchical dynasties and cliques, old business models and rigid policies are all at risk of failure (Hamel, 2013).

Change has become a difficult subject for many organisations mainly because they are not built for adaptability and flexibility. Many have rather been developed to follow a strict order of discipline and control, which allows little room for flexibility and open thinking. Most leaders, or CEO's, are of the view that strict control and rigid procedures are the way to succeed and when there is need for change they have little hope of transforming (Stevenson and Jarrillo-Mossi, 1986; Johanson et al, 2006). Many will have no option or the ability to transform, leaving them with only an opportunity for a turnaround, which is not as good as true transformation. Often turnarounds come too late and this will result in loss of competitive advantage and standing in the environment. Many identify human resources and their involvement as a key method in creating organisations that are change-ready and flexible. This is mainly because an organisation is only as good as its people and if human resources are not change- ready, no matter how many strategies are developed or consultants brought in, no fruitful results will be achieved (Hamel, 2013).

Another need that has drawn the attention of researchers, managers, scholars and even the public is the need to grow businesses to more sustainable levels (Smith et al, 2010). It is now an accepted fact that social, economic and environmental consequences that are created by rapid population growth, economic growth and consumption have become concerns for many organisations, be it private or public (Millar, et al., 2012). Therefore sustainability has become a huge agenda of the need for change management and it is a key driver for success (Millar, et al., 2012) in any type of organisations (St.Claire, 2013). However, for an organisation to make this kind of change it needs to start from the very top and have employees and other stakeholders actively involved, requiring skilful distribution of power and authority (Doppelt, 2009). This brings us back to the topic of having the right human resource in the form of leaders who are proactive and aware of the environment and the responsibilities they have to address them. Therefore if organisations are to develop leaders who are sensitive and aware of such demands proactively, they need to invest in their leaders and staff to be forward thinking and visionary (Hind, et al., 2009).

What exactly is organisational change? There are many explanations for organisational change but there is no one universally accepted definition. Nevertheless, the meaning and contents of the diverse definitions carry a common idea when evaluated individually.

According to Donnelly (1987), organisational change is the attempt by the management to improve the overall performance of individuals, groups and the organisation as a whole by altering the organisation's structure, behaviour and technology (Sisaye, 2001). Moran and Brightman (2001), articulate that change management is the process of continually renewing an organisation's direction, structure and capabilities to serve the ever changing needs of the internal and external customers (Todnem, 2005). Burnes (2004) further adds to this by stating that change is an ever-present feature of organisational life, both at operational and strategic levels thereby hinting the need for it to be dealt with from the very top. Considering the significance that change management has gained over the years, it is increasingly becoming important for organizations to have skills that support change management in the organisation.

The question still arises as to how public sector leaders can practically embrace sustainability related changes and embed them within their organisations. While there is a substantial body of literature on technical issues of sustainability, notably resource and carbon management, and metrics to measure change, there has been considerably less research into the actual practices and integration of sustainability thinking into models and policies for public sector organisations, which is the *raison d'être* of this research. Therefore, aim of this research is, thus, to investigate the key sustainability initiatives currently being implemented in the Abu Dhabi public sector organisations so as to improve their competitiveness.

Once an issue is chosen, decision makers will be challenged regarding recommendations on what initiative should be selected to support sustainability (Kotler and Lee, 2005). They need to be prepared to answer tough questions: Why and how can they integrate sustainability initiatives without distracting from the core business? How will sustainability initiatives give visibility to the organisation? Do these initiatives really work?

The central theme in this investigation is organisational transformational change in order to develop organisational capabilities as stated by diverse research studies in the field (Kuntz and Gomes, 2013). The organisation to be investigated is Abu Dhabi public sector, where at the present time it experiences such issues and the situation demands urgent attention in order to transform the division in line with the changes encountered both in its external and internal environments.

Given the dramatic changes at the global geo-political scene coupled with the unprecedented world financial crisis along with the rapid shift in the bargaining power of countries people have become cautious in every aspect of their life. There is a clear and present need for the Abu Dhabi public sector organisations to change in order to re-attain its strategic fit in line with the changes experienced in both the external and internal organisational environments (ADED, 2008).

If the political uncertainty of the Arab region is also taken into consideration and the fact that Abu Dhabi and the United Arab Emirates (UAE) are, as a whole, one of the few politically stable areas in the region that still enjoy growth, then the need for the Abu Dhabi public sector organisation to change in order to compensate for the surrounding challenges is compounded (ADPGHQ, 2015). Specifically for the public sector, the key issue is the inability to change as a result of complaisance and inertia. As a result, the organisation is falling behind and the risk of not being able to observe its mission and objectives in the future have now become a pressing matter (ADP, 2013). In addition, the changing needs of the public have been triggered from various sources some of which are the changes in government policies, sustainable development issues, and strategic direction of the country's economy (ADPGHQ, 2015).

For instance, the Transportation division within the Police force caters to all of the transportation needs of the police force as well as maintenance and repairs. There are 5,600 vehicles that range in forty different types and models. In addition to maintaining the varied police vehicles, the division is also looking after the repairs and maintenance of ambulances and rescue vehicles as well as the processing of traffic patrol cars. In line with the overall police force's strategy, the transportation division has developed its own departmental strategic plan to operationalise its activities. The key objectives of the plan are to provide comprehensive transport and work services; to ensure the readiness of transport and works management; to develop skills and

capabilities; to ensure the effective allocation and use of finance and technology and to work in partnership and harmoniously with the other departments in the organisation (ADPGHQ, 2015).

However, the above strategic objectives, for the most part, aim at ensuring departmental technical efficiencies – and despite the emerging change spirit of the transportation division – no such objective is currently addressing sustainability related change initiatives. Consequently, the notion of sustainability and leading change toward sustainability needs to be integrated into the current departmental strategic plan.

The study identifies the most appropriate ways to instigate change in order to transform the organisation to a more community centred, value for money and socially responsive police force in the future. The study will equally focus on the measures to be taken to increase greater employee engagement in order to build successful transformational strategies, given that employees are the most important asset of the organisation. The research will also seek to identify obstacles that hinder implementation to ensure that change is successful.

1.3 RESEARCH AIM AND OBJECTIVES

The overall aim of this research is to develop and validate a strategic framework for managing transformational change towards sustainability in the public sector organisations.

In order to achieve this aim the following objectives were identified.

1. To investigate and document the perceptions of Abu Dhabi public sector organisations (ADPSO) on the concept of sustainability.
2. To explore and document the key drivers for implementing sustainability initiatives (environmental, social and economic) in Abu Dhabi public sector organisations.
3. To investigate and document the key sustainability initiatives needed to effect change that are currently being implemented in Abu Dhabi public sector organisations.
4. To critically appraise and document the main challenges associated with implementing key sustainability initiatives needed to effect change in Abu Dhabi public sector organisations.

5. To critically appraise and document the extent to which key sustainability initiatives contributes to competitiveness.
6. To develop and validate a strategic framework for managing transformational change towards sustainability.

1.4 RESEARCH QUESTIONS

The following research questions were posed for the current study:

1. What does sustainability mean to Abu Dhabi public sector organisations?
2. What are the key drivers that have fuelled the need for implementing sustainability initiatives in Abu Dhabi public sector organisations?
3. What are the key sustainability initiatives currently being implemented in Abu Dhabi public sector organisations needed to effect change?
4. What key challenges do Abu Dhabi public sector organisations face in implementing sustainability initiatives?
5. What impact does effective implementation of sustainability initiatives have on competitiveness?

1.5 BENEFITS OF THE STUDY

The study will be of benefit to employees, managers, and leaders at every level and in every function of organisations across Abu Dhabi public sector. The results of the study will:

- Improve understanding and awareness of the meaning of sustainability at a conceptual level.
- Increase understanding on the key drivers for implementing sustainability initiatives. This could assist decision makers to develop and deploy sustainability strategy based on key drivers.
- Assist decision makers to identify and implement key sustainability initiatives, initiatives and key change management initiatives for dealing with sustainability initiatives.
- Improve awareness of the key challenges Abu Dhabi public sector organisations face in implementing sustainability initiatives.
- Provide evidence of the benefits of sustainability initiatives and managing change associated with sustainability initiatives.

- The developed framework provides broader guidance for organisations to implement sustainability initiatives into day-to-day practices. The framework could also help decision makers to craft and deploy key sustainability strategies to improve competitiveness.

The outcomes of the current study have already been published in one referred conference and presented the work to academics and practitioners. This research has therefore contributed both to the industry as well as the academic community.

1.6 SCOPE AND LIMITATIONS OF THE STUDY

The empirical scope of this study is limited to Abu Dhabi public sector organisations in general, Abu Dhabi Police in particular. The unit of analysis adopted for this study is the ‘organisation’ and the embedded unit is ‘individual employee’. Therefore, this study does not report the differences between private and public sector or micro enterprises, small and medium-sized enterprises’ and large organisations approach to sustainability initiatives for improved competitiveness.

The research reported in this study is largely exploratory in nature. This is because of the inductive nature of the methodology adopted. The goal of this research is to answer the research questions rather than testing hypothesis. Additional research with more elaborate and articulated designs is therefore called for, to further explore the complex relationships with implementing sustainability initiatives for improved competitiveness.

A strategic framework for transformative change towards sustainability is developed and validated. Even though the framework which has been developed and validated with experienced professionals, it has not been tested within an organisation.

1.7 STRUCTURE OF THE THESIS

The thesis has been organised in a logical manner in order to enable the reader to gain insight and understanding of how the key research objectives and research questions have been achieved. The layout of the thesis is in a logical sequence, commencing with the introduction to the study in chapter 1 to the conclusions and recommendations in chapter 9.

The structure is as follows: a review of literature was conducted at each stage to enable a better understanding of the research topic of the current study. This forms the basis of the study and allows for developing research questions. Furthermore, research methodology employed for this study is discussed. Semi-structured interviews with directors, advisers, managers and staff responsible for sustainability initiatives in Abu Dhabi public sector organisations were collected for the study. Results of the qualitative data analysis are reported. This lead to the development of a framework which was validated then the conclusions and recommendations are drawn.

Chapter 1 – explains the background and justification for the study. Then it discusses the research aim, objectives and research questions. Also it highlights the potential benefits of the study, scope and limitations of the study and gives a brief overview of the other chapters.

Chapter 2 and 3 – reviews the relevant literature on varied areas of sustainability and change management. A thorough review and analysis of the relevant literature helped to identify research gaps. A framework for change management to embed sustainability aspect is proposed.

Chapter 4 – discusses the research methodology that is used to empirically investigate the research aim and objectives. The chapter also discusses why a qualitative methodology was adopted. Furthermore, the sample size chosen for the study has been explained. Research process adopted for the study has also been described. The challenges encountered and the various research instruments used in mitigating such challenges have also been discussed.

Chapter 5 – discusses the perception of sustainability in Abu Dhabi public sector organisations along with the key drivers that have fuelled the need for implementing sustainability initiatives. Finally, chapter 5 concludes with a summary.

Chapter 6 and 7– Chapter 6 primarily reports the key initiatives and chapter 7 discusses the challenges for implementing sustainability initiatives. Also, the impact of these initiatives on the organisation competitiveness has been discussed. The results discussed in this chapter are based on qualitative data. Overall, chapter 5, 6 and 7

addresses objectives 1 to 5. In doing so, all the research questions of the current study have been addressed.

Chapter 8 – discusses the development of a strategic framework for transformative change towards sustainability. The findings from the previous stages of the research study were taken into consideration in the development of the framework. Finally, chapter 8 concludes with a summary. Overall, chapter 8 addresses the sixth objective of the current study

Chapter 9 – focuses on the conclusions and recommendations drawn from this study. It summarises the key findings of this research and also provides recommendations for the future research in the area of implementing sustainability initiatives for improved competitiveness.

CHAPTER 2 : A REVIEW OF LITERATURE ON SUSTAINABILITY

2.1 INTRODUCTION

This chapter presents a thorough review of literature in the area of sustainability, change key drivers, key initiatives, key challenges and the impact of sustainability initiatives on organisational competitiveness. By doing so, this Chapter addresses literature review related to Objectives 1 to 5.

2.2 SUSTAINABILITY

In recent times there has been an increase in the awareness and meaning to pursue sustainability. In spite of this the commitments are by few individuals, rather than a mass of individuals. Indeed, the underpinnings are not understood by a vast majority of individuals, which makes the concept of sustainability difficult to understand. According to Aspinall *et al.* (2012) literature on sustainability bemoans the fact that the concept is broad and lacks a broad consensus; usually this is followed by individuals own preferred definitions, which add to the lack of consensus. There are three pillars of sustainable development: economic, environmental and social sustainability. The concept of sustainable development is widely applied in different sectors worldwide (Morimoto, 2010).

It is interesting to note, that there are various types of definitions for sustainable development depending on the perspective of the definers (Amasuomo *et al.*, 2015). In his report on Our Common Future (Brundtland, 1987) states the classic definition for sustainable development ‘Humanity has the ability to make development sustainable to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs’. From this it can be seen that sustainability means the capacity for an activity to be carried on indefinitely into the future, given the amount and type of resources available. Development implies that society will change or grow in the same way. Indeed, sustainability suggests change and improvement that is compatible with environmental, social, economic and other limits, both now and in the long-term (Gray and Wiedemann, 1999).

2.3 CONCEPT OF SUSTAINABILITY

The concept of sustainability can be traced back centuries and as early as in the ancient civilizations of Egyptian, Mesopotamians, Greek and Roman; in modern times it appeared at the beginning of the environmental, or the green movement in the 1960's (Du Pisani, 2006). The first time that the term 'sustainability' appeared in the literature was by Meadows et al (1972) in their book 'The Limits to Growth'. Over time, and as environmental issues were highlighted at that time by campaigners, consumers and media, pressure was mounted on traditional business models to change or cease to exist (Millar et al., 2012; Berkhout, 2012).

In time, environmental concerns have not only become a governmental responsibility but rather a call to the whole humanity. This is best summarised by Maak and Pless (2009), who state that political, social, commercial, and environmental trends are producing demographic changes, globalization, shifts in the centers of economic power to include emerging markets, climate change and ecosystem degradation. Critically we see differentials in quality of life and resource scarcity. Therefore it can now be stated that unintended social, economic, political and environmental consequences are creating great concerns for businesses. Organisations both public and private alike are pushed beyond their boundaries to change the way they conduct their business (D'Amato et al, 2009). Therefore, sustainable development is a strategy that many organizations use to address this pressing need. But how do organizations go from their traditional operations to being sustainable? This is where change management and all of its related facets come to play (Millar et al., 2012). This is discussed in the next chapter.

Szulanski (2004), argue that due to various pressures from the wider environment, there has been drastic shifts in thinking and changes in priorities been made and ideas presented. However, there is still little or no guarantee, that organizations will take effective steps to integrate the new thinking within their organizations (Nidomolu et al, 2009). In other words, there is doubt to what extent organizational behavior will actually change. Actual change in terms of organizational behavior in itself will not be an easy task, and in a stark statement Chouinard et al (2011), say that collective progress is not yet evidenced and the negative impacts of business activity continue to grow. Millar et al (2012) concur and add that there is a relatively fewer amount of field

studies carried out on how organizations can actually implement the academic findings in this particular area or within a business agenda.

2.4 ORGANISATIONAL SUSTAINABILITY

Corporate, or organisational sustainability, is often referred to as managing the organisation's corporate social responsibility, or triple bottom line (Yongtae, 2012; Brammer, 2012). However, this approach is only focusing on selected parts of sustainability such as environmental and social aspects and it does not capture the all-important wider strategic and operational issues (Waldman et al, 2006).

Implementation and change management are crucial for organizations if sustainability is to be created and maintained (Berkhout, 2012). To that end, leadership plays a crucial role to this as it is leadership that changes existing structures and highlights the need for employees and managers to implement new strategies (Goehrig, 2008).

To build a sustainable business, it is imperative that the organization has leaders that are responsible and responsive to both internal and external stakeholder needs. Leaders need to be aware of their social and environmental responsibilities as well as their financial ones (Hind et al, 2009). Leaders should also be ready to deal with many moral complexities resulting from various stakeholders while maintaining relationships with them (Maak, 2007).

Research identifies that change management and sustainable strategies may not always appeal to managers and decision makers in an organization in the same manner (Pita-Castelo, 2012). Further, studies highlight that the concepts of sustainability are patchy and are not fully grasped even within committed organizations (Millar, et al., 2012).

In addition, research studies identify that when change management strategies are implemented, the change agent has a considerable role to play, but this element alone is not sufficient (Evans et al, 2004; Ansari et al, 2012). The barriers to completely implement change strategies seem to be a result of personal cognitive frameworks that are rooted in value systems of individuals (Sandhya and Markos, 2010). Therefore, these value systems should be addressed as well, if real change is to take place (Millar, et al., 2012).

In the notion of sustainability, from a corporate perspective, the most prominent view is the link that organizations use their capabilities to add value to their business model by using these capabilities in a proactive way and by demonstrating appropriate abilities or the ability to realize the benefits of a distinctive capability for the benefit of the firm and so achieve a sustainable competitive advantage (Porter, 1985; Matthews and Shulman, 2005; Pita-Castelo, 2012).

The concept of competitive advantage in the corporate literature is not new. A large proportion of the literature in strategic management is devoted to the concept of competitive advantage (De Marchi, 2012; Teece, 2012), where the basic idea is that a key task of strategy is to seek and attain an advantage over competition in order to ensure superior performance and positioning in the market and thus outperform rivals (Mohrman and Lawler, 2012; Ansari et al, 2012). In fact, the notion has been a guiding principle in the area of strategy, since Porter (1985) introduced the idea.

According to Porter (1985, p.3), ‘competitive advantage grows fundamentally out of a value a firm is able to create for its buyers that exceeds the firm’s cost for creating it. Value is what buyers are willing to pay, and superior value stems from offering lower prices than competitors for equivalent benefits or providing unique benefits that more than offset a higher price. He further states (1998) that competitive advantage sits in the more productive use of a firm’s inputs which, however, (it) requires continuous organisational innovation.

Ma (1999, p.711), concurs and adds that ‘competitive advantage is the asymmetry or differentiated in any firm attribute, or dimension, that allows one firm to better serve customers than others and hence create better customer value.

Kay (1993) agrees but articulates that a competitive advantage is a relative concept and it is only meaningful if it is compared against other companies in a given market. Equally, Coyne (1986) states that any given firm may have numerous advantages over rivals, for example, superior production methods and lower costs but the most important are the ones where customers place some level of value on them (Killen et al, 2012).

Grant (2002) observes, if a resource that enables the creation of an advantage is widely available in the industry it will eventually become a prerequisite for competition rather than a potential source of competitive advantage for any single player. He adds that

ultimately, there is no one single way of pursuing, achieving and sustaining a competitive advantage, and Ostroff (2012) and Davila (2012) are also in agreement.

The resource-based theory, reiterates that competitive advantage is gained by way of internal resources and capabilities, which in turn, are utilized to create superior performance (Barney, 1991; 1997; Barney and Hesterley, 1996; Hunt, 2010; Gibbert, 2012). However, most often the idea of sustainable competitive advantage is rooted within the private sector that has profit-oriented organizations and very little emphasis is placed on the public sector organizations (Matthews and Shulman, 2005; Prajogo et al, 2012).

A research study by Kay (1995) on several public sector organizations suggests that though the resource-based view and triple bottom line approaches are central to the notion of competitive advantage in private firms, they only apply to public sector organizations where competition exists (Priem et al, 2012). This is mainly because public firms are funded by the government for public service and are frequently not in the need to compete with other organizations when offering a similar set of services to the public (Prajogo et al, 2012).

However, the resource based view is clear and states that limitations related to resources and capabilities, internal or external may be, are equally applicable to any type of an organization in the private or public sector. Consequently, all organizations need to be taking into consideration the notion of sustainability and sustainable competitive advantages (Priem et al, 2012).

The Sustainable Development Commission (SDC) which was the UK Government's independent adviser service on sustainable development (closed in March 2011), attempted to delineate sustainability in broader terms; consequently, it stated that it can be defined as 'operations that meet the needs of the present without compromising the ability to meet future needs, or the ability of future generations to meet their own needs'. This definition has also been adopted by the United Nations World Commission on Environment and Development (WCED).

In other words, sustainability revolves not only around the problem finding, or solving such problems that have been identified, but rather it also focuses on the solution in

itself and the ability to make the solution last in the long run (Brammer et al, 2012). Hence the notion of sustainability is much more important and more than just social corporate responsibility, due to its inherent value proposition for thriving in the future and not just for merely surviving the present (Bettley and Burnley, 2008; Chouinard et al, 2011).

In the process, trade-offs between sustainability and economic competitiveness are debated (Kleindorfer et al, 2005). However, a number of authors in the field have challenged this view and insist that trade-offs are inevitable (Parkinson, 1990; Porter, 1991; Makeower, 1993; Porter and Kramer, 2011) in the process of pursuing and maintaining sustainable competitive advantages (Porter, 1998; Stevenson, 2010). Proctor (2010a; 2010b) developed a model for not-for-profit organizations entitled the 'Dual-Business Model for Nonprofit Sustainability'. The model has been devised for the main reason that non-profit organizational missions are distinct from that of for-profit organizations. The author notes that non-profit organizations cannot continue sustaining money-losing activities in the best interest of the public and hence must develop enough profitable activities to cover losses when fundraising is insufficient to reinvest in their causes in order to build balance sheets that are strong enough to withstand economic downturns.

In the process, author has identified four specific ways of how sustainability can be maintained. The first way is by looking at non-profit organizations as two types of businesses, or divisions, operating under one roof. The first type provides a service that cannot be operated profitably but it is evaluated on its ability of how well it fulfils the needs of the community. The second type runs profitable activities and reinvests profits into both types of business; therefore, it is evaluated on its potential for profitability. The second way is by being aware of how the organization is managed and supported; unrestricted giving is most useful to a non-profit activity whereas a 'close eye' needs to be kept to the activities that raise capital. The third way is by providing training to non-profit executives to enable them to develop and evaluate business plans for profitable new activities so that non-profit activities can be supported independently. The fourth and final way is by creating new methods for investing capital into non-profit activities via legislation.

Consequently, the above strategies can help not-for-profit organizations to break out of the uncertainty cycle that keeps them scrambling for funds, so that they are able to concentrate on how to better serve the needs of their communities. He maintains that a sustainable non-profit organization with a dual-business model operating under the four conditions summarized above should also be featuring the following:

- A clear definition of key mission activities and the upper bound of financial losses acceptable for these activities;
- The courage to reject money-losing undertakings from money giving activities such as gifts, grants and contracts that do not fully cover the cause(s) that they fund;
- Consistency in the share of charitable contributions in their revenue mix;
- An entrepreneurial approach to profitable activities that are lower in mission but based on the expertise and business infrastructure of the non-profits core activities;
- Paring down marginally profitable activities and unprofitable activities not central to the non-profits key mission.

He concludes by stating that when all stakeholders understand and support that the non-profit activity is equally a money-making responsibility, sustainability becomes a matter of day-to-day operations, rather than a campaign at the tail end of a fiscal year. He finally makes the statement that a mission cannot live on loss; to keep a non-profit activity alive there has to be a plan for profit.

Brundtland (1987) report noted that sustainable development is a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development and institutional change are all in harmony and enhance both current and future potential to meet human needs and aspirations.

Report continue to noted that sustainable development is not a fixed state of harmony, but rather a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are made consistent with future as well as with present needs. They maintain that the common theme when developing strategies for sustainable development should be the need of integrating both economic and ecological considerations in the process of decision making.

The report also determined that corporate sustainability should be a process aiming at creating long-term consumer and employee value by not only creating a "green" strategy aimed towards the natural environment, but by also taking into consideration every dimension of how a business operates in the social, cultural, and economic environment, including developing strategies that aim at building a company that fosters longevity through transparency and employee development. The latter is, clearly, directly linked with the arguments presented on change management, in the previous chapter. Hence the above definition is adopted as the operational definition of corporate sustainability in this study.

2.5 SUSTAINABLE DEVELOPMENT

In recent years there has been an increase of awareness and meaning to pursue sustainability. In spite of this the commitments are by few individuals, rather than a mass of individuals. Chiefly, this is mainly due to the fact that the underpinning of sustainability is not understood by a vast majority of individuals (Onwueme and Borsari, 2007). Therefore, this makes the concept of sustainability very difficult to understand. That is to say, in his report on Our Common Future (Brundtland, 1987) states the classic definition for sustainable development 'Humanity has the ability to make development sustainable to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs'. Thus, the generation of today have the right to use the resources available. In the same way organisations must consider their responsibility to the needs for future generations while undertaking the usage of resources (Brundtland, 1987).

Cashman (2005) points out the Conservative government in the UK between 1979-1997 defined sustainable development 'in cost-benefit terms as the relationship between economic growth and environmental protection and the internalisation of externalities within such as essentially economic approach to decision-making'. However, this fails to define any attempt to address the social perspectives of sustainability. Furthermore, Cashman (2005) states that the new labour government 1997-2010 broadened this understanding 'to include social factors, replacing the previous approach with a social welfare approach which builds social justice and the social benefits of environmental protection into its concept of sustainable development'. Besides, according to Renukappa and Egbu (2012) 'it is generally agreed that sustainability has

environmental, social and economic dimensions, while others attempts to treat all three aspects simultaneously’.

Environmental sustainability: according to (Green-innovations, 2004) is ‘the ability to maintain things or qualities that are valued in the physical environment’. Thus, the principle is to effectively manage these physical resources so they are conserved for the future (Renukappa and Egbu, 2012). Furthermore, Bogardi et al. (2012) states ‘meeting the future needs of growing human populations will have major implications for the supply of water to ecosystems’. In other words, organisations need to operate under an environmental sustainable perspective, ensuring that emissions don’t accumulate faster than the natural system can absorb (Dyllick and Hockerts, 2002). Similarly, Jones and Kramer (2010) state that ‘Environmental sustainability refers to the protection and renewal of the biosphere for present and future generations’. Hence, to only use natural resources that are consumed at a lower rate than natural reproduction and not to participate in activities that could damage eco-systems (Dyllick and Hockerts, 2002).

Economic sustainability: Economic sustainability according to (Haugh and Talwar, 2010) is an important factor to achieve corporate financial success and this is key for survival in the long term as the amount of output cannot exceed income. Thus, leading to the importance of ensuring that future generations would not be at a disadvantage due to the actions of individuals at the present is a key factor to be involved in perspectives (Renukappa and Egbu, 2012). Similarly, Jones and Kramer (2010) state ‘Financial sustainability refers to the ability of the organisation to provide for its proprietors needs now and into the future’. In other words, organisations need to be able to understand and investigate how to sustain growth, whilst providing for future needs.

Social sustainability: Social sustainability is to help maintain and fulfil individual’s needs whilst maintaining social relationships that in long term may grow (Jones and Kramer, 2010). As follows, Carroll (1979) points out that social sustainability in particular needs organisations to be able to accept willingly ethical, economical and legal expectations of all stakeholders and not just for the financial benefit of organisational shareholders. Similarly, (CRI, 2003) acknowledges that Corporate Social Responsibility supports the organisations involvement with stakeholders to create long term value. Furthermore, (CRI, 2003) explains that ‘corporate citizenship describes a firm’s engagement with stakeholders rather than shareholders alone’. Thus, terms used

in industry today can muffle the concept of sustainability, such as corporate social responsibility, environmental management and corporate citizenship (Renukappa and Egbu, 2012).

Triple bottom line: Notably, this approach is where economic, social and environmental aspects are viewed at the same time by organisations for sustainable performance (CRI, 2003). Similarly, Neubaum et al. (2009) explains that this approach looks at how economic, social and environmental responsibilities are managed by organisations. In consequence of this, all aspects need to be looked at in equal quantity and not just one perspective to dominate the sustainable view of the organisation.

2.6 KEY SUSTAINABILITY INITIATIVES

For the purposes of this research, sustainability initiatives are defined as: “key practices undertaken by an organisation to support environmental, social and economic causes and to fulfil organisation’s commitments to sustainability”. Causes most often supported through these initiatives are those that contribute to community health (e.g. HIV/AIDS prevention), safety (e.g. crime prevention), education (e.g. job training), employment (e.g. hiring practices), the environment (e.g. waste recycling), reducing natural resources (e.g. reducing energy consumption) and reducing carbon emissions (e.g. optimising logistics operations).

Climate change is one of the most important challenges of the 21st century. Indeed, this phenomenon is not only of concern to countries in the Arab world but also to all countries all over the world. This issue mainly arises from overdependence on fossil fuels which combustion results in the release of greenhouse gases, mainly carbon dioxide, which causes a sustainable rise in global temperatures (Al-Mebayedh, 2013). Nader (2009) argues that global warming is an existential issue. It is no exaggeration to say that, if we fail to create sustainable, low carbon economies, humanity’s future looks bleak.

It is interesting to note, that the costs of climate change are increasing maybe even per capita with a growing world population, as greenhouse gasses are continuously piling up in the atmosphere. Yet, the marginal cost of climate change impact does not outweigh the marginal utility from contributing to climate change (Oberheitmann,

2011). This may only be the case, if various tipping points are reached and climate change costs increased tremendously, literally from one day to another it may be too late. Similarly, Oberheitmann (2013) acknowledges that if climate change further continues, these tipping points can be reached, at which the climate abruptly and irreversibly reacts.

Furthermore, climate change has adverse effects to economies all over the world. For all of climate changes destructive ability, it is relatively easy to control and reverse if individuals, communities and countries work together as a team (Al-Mebayehd, 2013). The perception of the individual contribution to the generation of climate change, is still an important factor both for the increasing global contribution of individuals to climate change, but also for the lack of sufficient individual contribution to its mitigation (Oberheitmann, 2013).

Analysis of the above literature review revealed that researchers have considered sustainability initiatives in isolation. However, sustainability requires a holistic view of environmental, social and economic dimensions. Therefore, it is crucial to investigate “what are the key sustainability initiatives (environmental, social, and economic) currently being implemented in ADPSO needed to effect change”, which is the third research question posed and investigated by the researcher of this current study. The results are discussed in chapter 6.

2.7 KEY SUSTAINABILITY CHALLENGES

Stoner et al (1994) see it as the discovering and adopting new attitudes, values and behaviour with the help of trained change agents, who lead individuals, groups or the entire organisation through the process. Daft and Weick (1984) articulate that it is the adoption of a new idea or behaviour by an organisation.

Human resources in organisational change: It is, clearly, evident therefore that a reoccurring theme and an inherent area of focus in almost all of the definitions is the involvement of human resources. This is popularly known today as employee engagement and it is the emotional and intellectual commitment of an employee to an organisation (Baumruk, 2004). Others refer to it as ‘passion for work’ (Truss et al, 2006; Kular, et al, 2008). Organisations to be successful need to look for new avenues

of going ahead and employee engagement has been identified as a focal point in creating some of these new avenues. A number of research studies in the field highlight that employee engagement is the most crucial factor when it comes to successfully implementing a change strategy (Shaw, 2005; Dicke, 2007).

Triggers and management of change: Change management is triggered at large from the external environment and includes requesting, determining, attaining, planning, implementing and evaluating changes, by using modern management tools and strategies to face the challenging situations productively (Paton and McCalman, 2008). This reduces the risk of negative impacts and improves organisational performance in achieving stated corporate objectives. In the process, the philosophy of change directly relates to organisational culture and leadership styles since all these parts are interrelated (Commerce, 2007). That being said, triggers of change management can also be from the internal environment. While the external forces can come as opportunities or threats, internal forces can mean that members of the organisation are no longer satisfied with its performance, and expect improvements to take place (Perkins and Arvinen-Muondo, 2013).

Once triggers are recognised, organisations then move onto identifying ways to instigate change and manage it effectively. In doing so, it is important to determine the various forces that are likely to be involved in a change initiative. As stated by many authors and researchers, change does not happen in a vacuum; change influences and is, in turn, influenced by many forces from the organisation's external and internal environments, and Perkins and Arvinen-Muondo (2013), articulate that one such key force is Human Resources. However, invariably there will be resistance to change from the various stakeholder groups depending upon their agendas. This is another key aspect that change managers need to manage; the 'resistance to change'. Therefore, the key task when managing change is to know how to change with minimum problems in order to gain maximum effectiveness and achieve the desired goals.

Consequently, the literature on change management has two distinctive and interrelated areas:

- The driving forces; forces that initiate change and can be from the organisation's external and/or internal environments;

- Resisting forces; forces that resist the change and are usually found amongst the organisation's stakeholder groups.

That being said, managing change is not an easy task and success of change initiatives is not all that positive. In other words, rate of failure is high. Research evidence shows that almost 70% of change initiatives fail (Miller, 2002). Moreover, in most cases the failure to change results in drastic implications for organisations, in terms of loss of market position, loss of key employees and stakeholder credibility (Moorsel, 2012).

Leadership for change: Burkes (2011), states that change is, in fact, humanity's chronological account of leaders who envisioned the next level of development and acted as change agents. Such role of organizational leaders becomes extremely crucial when an organization needs graduating to the next level of development, or to become free from behavioural diseases of bureaucracy such as top-down information flow and problem insensitivity, and routine jobs and dissatisfaction (Schein and Greiner 1977, cited in Burke 2011: 146). In doing so, successful communications at interpersonal, intra-group, and inter-group levels are critical in order to involve diverse stakeholders in the process and minimise resistance to change (O'Berry, 2005; Sookman, 2008; Wagner and Harter, 2006).

Lack of resources: The UK police service has previously seen unprecedented increases in funding and it would appear that as a result of the downturn many police forces now face difficulties, due to cuts in public spending (Kirkup, 2008). Budgets, spending cuts and savings are terms society will increasingly become accustomed to now and into the future as public sector spending cuts remain high on the agenda of government and public organisations. Indeed, increasing financial problems, combined with finite resources and ever growing demands being placed on the police, issues surrounding expenditure, budgets, costing and performance targets play an integral part in today's police services across the world (Gravelle and Rogers,. 2011).

It is not surprising central government funding to police and crime commissioners in the UK reduced by £2.3 billion (25%) in real-terms between 2010-11 and 2015-16. This is an 18% real-terms reduction in total police and crime commissioner funding when the local council tax receipts that forces receive are included. In 2015-16, the percentage of central government funding to forces varies from 46% to 85%. Indeed, the forces most

affected by funding reductions are those with a higher percentage of total funding coming from central government. Currently, facing real-time budget reductions accompanied by significant structural reform, it will be for the police service to deliver a better service for less (Neyroud 2010; Davis, 2010).

Procurement is a window of opportunity in facing financial constraints, as the National Audit Office (2013) point out that many forces collaborate to improve their buying power, negotiate lower prices and make savings from combining back-office functions and reducing administration costs. The next section discusses the impact of sustainability initiatives on the competitiveness.

2.8 IMPACT OF SUSTAINABILITY INITIATIVES ON ORGANISATION COMPETITIVENESS

Porter (1985, p.1) points out that ‘competition is at the core of the success or failure of firms’. Mainly, whether an organisation is doing well or not competition is one of the main factors why. In other words, this determines the suitability of an organisations activities, which can add to its performance. Hence, factors such as innovations, interconnected structure and thorough implementation. In addition, competitive strategy is the ideal competitive place in the industry for an organisation and this ideal area is where competition happens. Fundamentally, competitive strategies intend to lay the foundations for a profitable and sustainable position when up against industry competition (Porter 1985). Indeed, Porter (1985) acknowledges cost advantage and differentiation are the two types of competitive advantage that an organisation possess.

Cost leadership, differentiation and focus: During a cost leadership strategy the organisations will visualise to be the low-cost producer in industry. That is to say, if an organisation can reach and sustain overall cost leadership, then this will help it to reach higher performance in the industry. However, a cost leader cannot ignore differentiation and needs to achieve proximity or parity in all bases relative to competitors to be able to perform higher than at an average rate (Porter 1985). A differentiation strategy involves the organisations to become individual or unique within industry. In other words, this is by guide lining dimensions that the consumers value. Thus, aspects will be selected that consumers believe are important and then position itself to meet these aspects. Resulting from this an organisation which can sustain and reach differentiation will

perform higher than the rest. Nevertheless, this depends on whether the premium exceeds the extra costs for this uniqueness (Porter 1985). Notably, the focus strategy concentrates on a narrow competitive scope in industry, a segment or group of are selected and the strategy is based around them. In addition, this is accomplished by optimizing for the target segments and by this the focuser will seek to achieve competitive advantage in its target segments. In addition, the focuser can take advantage of sub-optimization due to broadly targeted competitors. This is due to competitors not meeting the needs of segments, which can bring differentiation focus into the scope. Rather in comparison competitors may also be over performing to meet the needs, inducing a higher cost than necessary, which creates opportunity for cost focus (Porter 1985, p.16).

Sustainability: Fundamentally, these strategies for competitiveness cannot occur if it isn't sustainable. That is to say, during actions which improve industry structure could incur increased income. Hence, organisations need to have separations so others find it different to interpret and implement their strategy (Porter 1985, p.20).

Value chain and competitive advantage: Notably, Porter (1985, p.36) explains that the value chain is the collection of activities that organisations undertake. In addition, an organisations chain may differ depending on location and distribution. It follows that, the differences between competitor's value chains are key, as differences will determine competitive advantage.

Technology and competitiveness: One of the main drivers of competition is technological change, although regardless of the importance the relationship between the change and competition is vastly interpreted wrongly. In consequence of this, technology involved in organisations can have a vital impact on competition and if this technology effects the organisations competitive advantage or industry structure then this is important (Porter 1985).

That is to say, the value chain can be used to comprehend the role of technology in competitive advantage. According to Porter (1985) 'A firm, as a collection of activities, is a collection of technologies. Technology is embodied in every value activity in a firm, and technological change can affect competition through its impact on virtually any activity'. In addition, as technology is embodied in every value activity, it can have

an important factor on differentiation and cost. Nevertheless, an organisation which can discover and implement a technology better for performing an activity, will no doubt gain competitive advantage over competitor (Porter, 1985).

Strategies and competitiveness

Strategy is a broad based formula involving principles to be applied in order to achieve a purpose. Indeed, these principles are guidelines in order to reach organisational goals. In other words, strategy is the long-term strategic direction of an organisation and its action in achieving organisational purpose. In the same way, strategy is both a plan for the future and pattern from the past. It is the match an organisation makes between its competencies and the opportunities and risk created by the environment (Bell *et al.*, 2010). According to Johnson and Scholes (2002), strategy is the direction and scope of an organisation over the long term, which achieves advantage for the organisation through its configuration of resources within a changing environment and to fulfil stakeholders' expectations.

There can be confusion over terminology used to describe strategy, which is further compounded by the differing approaches devised to enhance understanding of competitive advantage (Bell *et al.*, 2010). According to Rus *et al.* (2012) an organisation has competitive advantage when it is implementing a value creating strategy not simultaneously being implemented by any current or potential competitors. Besides, sustained competitive advantage consists of a value creating strategy that is not simultaneously implemented by any current or potential competitors and when other organisations are unable to duplicate the benefits of the strategy.

Mckiernan (1997) points out that there are four distinct areas of thought towards competitive advantage. Firstly, the prescriptive approach emphasises long-term planning in order to achieve the best fit between organisational strategy and its environment. The setting of longer term objectives is key in order to support all elements involved in the implementation. However, during periods of rapid change this approach is in-appropriate. Next, according to Mintzberg *et al.* (1995) points out that the emergent approach is more suited to the dynamic and hyper-competitive environment. Indeed, strategy is a combination of deliberate plans and emergent adjustments over time.

The most dominate paradigm three decades ago was that of competitive positioning also known as the outside-in approach because of its focus on the environment. This approach centres on the premise that an organisation positions itself within its competitive environment with the intention of gaining superior performance (Bell *et al.*, 2010). Finally, the core competencies approach takes the opposite approach to competitive positioning. This approach suggests that competitive advantage arises from an organisations' internally developed core competences and capabilities (Prahalad and Hamel, 1990). This approach is known as the inside-out approach as it assumes that competitive advantage depends upon the behaviour of the organisation, rather than its competitive environment (Bell *et al.*, 2010). A moderate view of these approaches points out that public service organisation would be best suited to look upon these approaches as being complementary. As organisations need to develop both external and internal focus in order to develop knowledge based competences and implementation strategies to manage change (Mintzberg *et al.*, 1995; Prahalad and Hamel, 1990).

However, empirical study into the impact of sustainability initiatives on competitiveness (i.e. economic, social and environmental values) is relatively under researched. Therefore, it is crucial to investigate “what impact does sustainability initiatives have on competitiveness”, which is the fifth research question posed and investigated by the researcher of this current study. The results are discussed in chapter 6.

2.9 SUMMARY

This chapter has presented a thorough review of the literature on sustainability, concepts of sustainability, key drivers, initiatives, challenges and their impact. The next chapter discusses about managing change to embed sustainability in public sector organisations.

CHAPTER 3 : A REVIEW OF LITERATURE ON CHANGE MANAGEMENT

3.1 INTRODUCTION

This chapter presents a thorough review of literature in the area of change management. The chapter discusses types of organisational change, resistance to change, attitudes and reactions to change and the role of leadership in change management. The chapter discusses a change management approach and concludes with a summary.

3.2 A CRITICAL REVIEW OF CHANGE MANAGEMENT

The well-known passages of Heraclitus (535-475 BC) that ‘everything flows and nothing stands still’ or that ‘no man ever crosses the same river twice’ are, perhaps, an appropriate beginning in attempting to introduce the notion of change. The standard definition for change from diverse dictionaries is that change is the process in which there is a cause to move or to pass from one state to another, or the act or an instance, of making or becoming different.

In a world characterised by unprecedented change driven by geo-political transformations, relentless technological advancements, globalisation, the diminishing of trade barriers, increasing competition and sophisticated and demanding consumers to mention but a few the only thing that is certain is, indeed, change.

Therefore, an organisation’s ability to keep pace with the rate of change, as witnessed nowadays, is directly related to its capacity to adapt (Berkhout, 2012) and respond to the external environmental challenges (Li et al, 2011; So-Yol Lee, 2012) and diverse competitive pressures of change (Shaker, 2011). To that end, there is a clear agreement between diverse authors in the field that the necessity for change management has reached a critical point (Boulos et al, 2011; Mohrman and Lawler, 2012; Parker, 2012) and that the goal of change management is to ensure that an organisation is in sync with its external environment by developing such capabilities that reflect the challenges encountered in the external environment (De Marchi, 2013).

3.3 WHAT IS CHANGE MANAGEMENT?

Babcock and Riley (2012) make the metaphor that change management feels like changing the tires of a moving car and state that this is precisely how managers in organisations feel like when initiating a change programme – and that it is especially challenging when the environment that organisations operate in are changing at a rapid phase. The road that organisations need to take to implement change never stays static, management need to consider many stakeholders and situations while they go towards their change initiatives to achieve their target objectives (Blank, 2013).

According to MCarthy and Eastman (2010) change management involves requesting, determining, attaining, planning, implementing and evaluating changes, and using modern management techniques to deal with the challenging situations productively. This also reduces the risk of negative impacts and improves organisational performance in achieving the stated corporate objectives. Commerce (2007) agrees and adds that the philosophy of change directly relates to the organisation's culture simply because change cannot successfully take place without changing the overall mentality of the organisation.

MCarthy and Eastman (2010) further state that change is a natural and inevitable process and it must be looked as another normal fact of life rather than something to be feared or avoided. This is because, they continue, change is common to any industry, business, individual or living entity. There are many reasons that trigger change. However, all these can be broadly divided in two main categories; external factors and internal factors.

The narratives in the field clearly discuss that most of the changes are triggered from the external environment (Susman, et al., 2006) and that organisations should have the ability to adapt and cope with these aspects as a standard practice (Paton and McCalman, 2008). On the other hand, internal triggers can also instigate change in an organisation mainly due to the search for efficiency (Mohrman and Lawler, 2012; Priem et al, 2012). In the process, a few common questions that arise when evaluating a change situation are: What to change? What to change to? How to change? How to avoid failure in the change process? (Goldratt, 1994).

It is also important to identify and measure the scale of change. The Institute of Managers during the 1990s claimed that 70% of their members experienced restructuring every two years in their career. More recent research (Prochaska, 2000; Blount and Janicik, 2001; Mohrman and Lawler, 2012) suggests that the pace of organisational change has accelerated with most organisations changing every year. Worrall and Campbell (2000) articulate that, nowadays, the main focus of change are to reduce costs, change the culture of the organisation, deal with redundancy and de-layering aspects, close sites, and outsourcing to mention but a few key issues - Cooper (2002) is also in agreement.

Change is a natural phenomenon of organisational life and as such Ford and Ford (2010) state that the idea needs to be instilled in the minds of all. Ridgeway and Wallace (1996) approach the notion of change differently; they articulate that there are hard and soft issues to address in the process. Hard issues are said to be changes to strategy, structure, systems, performance and productivity. Soft issues are more focused on the culture of the organisation, leadership styles, behaviour, competencies, motivation and overall attitude. Bridges (2003) adds that in a change management process there are two distinctive aspects; the transition towards change and change itself. He further explains that change is the way in which things will become different in the future whereas transition is how the change takes place. He further continues by stating that change consists of events where transition is an on-going process and change is the outcome that one tries to achieve whereas transition is about the strategy to get there.

3.4 TYPES OF ORGANISATIONAL CHANGE

There are many ways of looking at organisational change. However, it is possible to categorise these into specific types by summarising the key similarities and differences of the narratives in the field.

- **Planned change:** This is where organisational change is planned and corporate planning is provided for the changes expected. In this approach organisational change is seen as a process of moving from one state to another as a series of pre-planned steps. Planning is based on the assumption that the organisation is operating in a stable and hence predictable environment. The main emphasis is on a pre-planned, rational, central and a systematic change process. The Main criticism for

this particular approach is that, nowadays, it is hard to assume that the organisational environment is stable due to its dynamic nature (Teece, 2012).

- **Emergent change:** The popularity of emergent theory of change increased with the criticism of planned approach towards change. The emergent approach towards change is more recent and seen as practical over the incremental approach. In this perspective the change is seen a continuous, unpredictable and constant process that any organisation could be faced with. Emergent change is implemented as a bottom up approach where employees are facilitated by divisional managers. All employees are kept ready to face change, trained with necessary skills and competencies in a dynamic environment. Emergent change relies on effective communication, high cooperation and collaboration between management and employees (Brown, 2005).
- **Incremental change:** This could be stated as an advanced version of planned change. However, the difference is that planning is done logically and changes are done incrementally. This has often comprised changes in relation to the external environment. Generally speaking, in this approach managers try to match the organisational performance and services offering after analyzing environmental needs. A gap analysis is conducted and proper corrective actions are taken. When compared with other models this is not seen as a “blinded” method. James Quinn (1978) in his theory ‘Logical incrementalism’ states a similar concept when it comes to developing strategies in a changing environment. Again the main criticism for this model is the inability of coping up with drastic organisational changes (Brown, 2005; Bock et al, 2012). However, the particular strengths of this type of change are continuous progression rather than a “frame breaking burst” approach, only affecting one organisational section rather than transforming the entire organisation, maintains existing equilibrium rather than reaching a new equilibrium, effects through the normal structure rather than creating new one and it involves improved technology, rather than breakthrough technological advancements (Lau, 2010).
- **Stepped change:** This is possible when a trend line of a particular factor stops becoming smooth and there is a significant jump in direction upwards or downwards. Step change is not possible with every organisation as the structure does not allow stepped change unless otherwise taken specifically. Also it is

difficult to spot in advance, as strategic planning has moved from trend analysis towards scenario planning (Randall, 2004).

- **Transformational change:** Johnson and Scholes (2010) argue that given the intricacies and the high competitive nature of the external environment, every organisation should be able to handle radical drastic changes. They further state that radical change is involved and the organisation acts in a manner that is currently outside of its existing paradigm. This clearly involves drastic cultural shift in order to succeed – and this in itself is one of the main criticisms of this type of change. Given the high nature of involvement in this type of change, Ashburner et al (1996) emphasise the need to gather a comprehensive view of targeted transformational change before opting for it. In the process, five key aspects are suggested as indicators of ascertaining the feasibility of such transformational change (Brau, 2006). These are the existence of multiple and interrelated changes across the system as a whole, the creation of new organisational forms at a collective level, the creation of roles at the individual level, the reconfiguration of power relations (especially the formation of new leadership groups) and the creation of a new culture, ideology and organisational meaning. Ferlie et al (1996) also agree and argue that transformational change goes beyond strategic change by all means, since it aims to change the organisation from its core. Accordingly they stress on evaluating four issues such as perception about the value of the employees, attitude towards knowledge creation, attitude towards refining the process of application, and perception of motivation as crucial towards achieving transformational change (Clegg, et al., 2011).
- **Radical Change:** This type of change involves radically changing an "accepted" or "taken for granted" situation in a large scale, such as changing the state of economy, or social structure. This type of change rarely makes its mark in an organisation, as this may be a strong factor for resistance.

On the other hand, Authenticity Consulting (2005), from a practitioner's point of view have re-classified and operationalized the various types of change into four specific categories.

These are:

- **Organization-wide Versus Subsystem Change.** Examples of organization-wide change might be a major restructuring, collaboration or “rightsizing.” Usually, organizations must undertake organization-wide change to evolve to a different level in their life cycle, for example, going from a highly reactive, entrepreneurial organization to one that has a more stable and planned development. Experts assert that successful organizational change requires a change in culture – cultural change is another example of organization-wide change. Examples of a change in a subsystem might include addition or removal of a product or service, reorganization of a certain department, or implementation of a new process to deliver products or services.
- **Transformational Versus Incremental Change.** An example of transformational (or radical, fundamental) change might be changing an organization’s structure and culture from the traditional top-down, hierarchical structure to a large amount of self-directing teams. Another example might be Business Process Re-engineering, which tries to take apart (at least on paper, at first) the major parts and processes of the organization and then put them back together in a more optimal fashion. Transformational change is sometimes referred to as quantum change. Examples of incremental change might include continuous improvement as a quality management process or implementation of new computer system to increase efficiencies.
- **Remedial Versus Developmental Change.** Change can be intended to remedy current situations, for example, to improve the poor performance of a product or the entire organization, reduce burnout in the workplace, help the organization to become much more proactive and less reactive, or address large budget deficits. Remedial projects often seem more focused and urgent because they are addressing a current, major problem. It is often easier to determine the success of these projects because the problem is solved or not. Change can also be developmental – to make a successful situation even more successful, for example, expand the amount of customers served, or duplicate successful products or services. Developmental projects can seem more general and vague than remedial, depending on how specific goals are and how important it is for members of the organization to achieve those goals. Some people might have different perceptions of what is a

remedial change versus a developmental change. They might see that if developmental changes are not made soon, there will be need for remedial changes.

- **Unplanned Versus Planned Change.** Unplanned change usually occurs because of a major, sudden surprise to the organization, which causes its members to respond in a highly reactive and disorganized fashion. Unplanned change might occur when the Chief Executive Officer suddenly leaves the organization, significant public relations problems occur, poor product performance quickly results in loss of customers, or other disruptive situations arise. Planned change occurs when leaders in the organization recognize the need for a major change and proactively organize a plan to accomplish the change. Planned change occurs with successful implementation of a Strategic Plan, plan for reorganization, or other implementation of a change of this magnitude. Note that planned change, even though based on a proactive and well-done plan, often does not occur in a highly organized fashion. Instead, planned change tends to occur in more of a chaotic and disruptive fashion than expected by participants.

The above section several aspects of organisational change has been discussed. This study focusses on transformational change; therefore next section explores resistance to organisational change.

3.5 RESISTANCE TO ORGANISATIONAL CHANGE

Resistance is inevitable, in other words, it can easily be said that resistance goes hand in hand with change management. In fact, Dent and Goldberg (1999) state that it has become a well-established mental model. Gary Evans (2004) explains that organizational change has a broader scope compared to hiring a new employee. It also involves adopting adaptive measures in the various aspects of organizational life, such as organizational culture, work processes and job responsibilities. Such change can lead to an overall transformation, if radical programs are implemented. Reasons for change in the workplace may include implementation of a strategy to achieve certain goals, transition to a different method of operations, adjusting to the effects of an external force and designation of a new leader or new manager whose work ethic could affect the entire organization or unit (Evans 2004).

Mark Ahn et al (2004) recognize that change in the organization affects not only its structure and culture, but also the personal management styles of its leaders; thus managing change is an essential part of leadership. One element though that he and his colleagues have mentioned in their study is the role of the 'business press' in featuring corporate leaders, or management celebrities, who promote 'stereotype roles and scenarios' when it comes to managing organizational change.

In his discussion, Evans (2004) identifies four stages that affect productivity as the organization deals with change: denial, resistance, exploration, and renewal. He defines resistance as the inability of employees to accept, or embrace, a change that management wants to implement and notes an equal rate of 15% among those who are for and 15% for those who are against a certain change and the remainder 70% is 'sitting on the fence'. He further adds that such resistance could be due to frustration and anxiety, potential loss of status, payment, or power, fear of the unknown future and uncertainty of adaptability, perceived unfairness of the change, violation of mutual trust, loyalty, and commitment, a member has a competing commitment that does not fit in with the change, desire to protect what the employee feels as the best interests of the organization and intention to stir debate and suggest other options. However, Thomas and Hardy (2011) add that not all forms of resistance lead to negative results, for these could even facilitate or serve as a catalyst of change.

Some resistance, as can be accepted, is inevitable. However, according to Baker (1989) there are some occasions where management decisions result in creating situations where normal uneasiness becomes a severe problem, or a major issue, in the organisation. For example, lack of information provided; managers in many instances try to do good but end up in creating situations in which team members or other staff feel affected or neglected. Therefore it is important for managers to provide as much information as possible before the change and further inform the affected employees of the reasons for the change. Workers who receive correct and timely information about a change are better at accepting change than those that do not (Keohane, 2010). Uncertainty about new work expectations is another example: workers will resist initiatives of change due to uncertainty they have on the new tasks that they will have to perform. Anxiety will increase if they are not adequately informed of the skills and knowledge they are required to perform the new tasks, as workers will fear not having them to perform the new tasks. Therefore it is the managers' responsibility to assure the

workers and other staff that required training and knowledge will be adequately provided with to perform as required (Mohrman and Lawler, 2012).

Fine (1986) argues that humans always resist change even when it is related to growth and development. Hence fear of the unknown is what mostly creates this resistance. Therefore, change agents or managers in charge of implementing change or even administrators of change must have the ability of evaluating why an employee's reaction to change escalates from a simple uneasiness to negative or even aggressive behaviour such as absenteeism, boycotts and even sabotage (Baker, 1989).

3.6 ATTITUDES AND REACTIONS TO CHANGE

Generally, the natural tendency is to avoid and restrict change unless it is minor and no significant damage is forecasted. It is very important to research about why and how resistance to change is developed within an organisation (Watson, 2001). Torrington and Weightman (1994) identified four broad types of change:

- Imposition initiated by someone else normally from 'on high' or externally.
- Adaptation, changes in attitude or behaviour at the behest of others.
- Growth, responses to opportunities normally with favourable consequences.
- Creativity, where individuals are in control.

Torrington and Weightman (1994) and with the agreement of Watson (2001) continue and discuss a number of possible reactions to change:

- Enthusiastic co-operation and support, acceptance.
- Passive resignation- indifference, apathy, loss of interest, minimal contribution.
- Passive resistance- regressive behaviour, non-learning behaviour.
- Active resistance- Protests working, working to rule, minimal work, slowing down, committing errors intentionally.

Any organisational change initiative often meets resistance to change, which Coch and French (1948: 520) describe it as "a combination of individual reactions to frustration with strong group-induced forces," while Lawrence (1954) explains resistance to change as "one of the most baffling and recalcitrant problems which business executives face." Hirschheim and Newman (1988) count resistance to change as an adverse reaction,

while Nadler (1993), Pugh (1993) and Carnall (1994) view it as a problem either to be solved or minimized (Zimmermann, 2011).

However, as discussed earlier, authors in the field agree that resistance to change usually emanates from the fear of the unknown, where the members of the workforces cannot envision the outcome of change and instead get driven by premonition of losing whatever safety and security they have for the present. This phenomenon makes resistance to change so commonplace in any change initiative, where it surfaces in various forms.

For example, in a certain situation, the members of the workforce may try to derail the change initiative or slow down the entire process by adopting disruptive strategies (Durant 1999) which, in turn, may leave only two options for the organisations, such as to underpin the core source of resistance and eliminate it (dismissing the main protagonists of change), or to formulate counter strategies (through discussions and campaigns) to eliminate the cause of resistance. In any case organisations always consider resistance to change as a negative aspect, and researchers like Durant (1999) observe that the intensity of that outlook is reflected in such organisational actions (Hinds, 2003).

In another instance, resistance to change can occur through direct denial of a section or the entire workforce who may refuse to accept that change is being initiated to eliminate the barriers before organisational sustenance and growth avenues. For example, an organisation may anticipate the possibility of losing competitive advantage in want of new technology and new business policy, but at the same time may find it difficult to convince its workforce about the validity of this futuristic vision. Yet in this case the organisation would have no alternative but to carry on explaining why it needs a change and what policies need to be changed, with the hope that at some point of time the workforce would realize the necessity of change and would embrace the same (Demers 2007).

The types of resistance to change do not end with the above instances; instead may take a far more complicated shape as one learns from Durrant's (1999) observations. For example, the members of the workforce may embrace the change due to unspoken or unresolved pressure or by just complying with the fellow members of the workforce,

but after a certain period of time they may get impatient or otherwise disapproving of the change, thereby forcing the organisation to re-strategize the entire change initiative to save it from premature death (Hinds, 2003).

Maurer (1996) demonstrated that 50%-70% of all major company's change efforts fail and resistant towards change is identified as the main contributor for the failure (Dent, 2002). Even though resistance to change is well studied this again has its limitations. Jermier et al (1994) argue that both the interests of managers and workers must be taken at a similar magnitude during a change process.

Block (1993) highlighted that the resistance to change might occur when people do not trust or have bad experiences in the past regarding a change process. O'Toole (1995) identified that resistance to change is mainly to protect established social relationships and perceived threat of losing those (Dent, 2002). Basically, any attempt to introduce organisational change will experience some sort of a resistance which could be severe in certain instances and mild in certain instances. The main reason for the resistance to change is the lack of understanding about the change process. Also workers are naturally not ready to change as they are anyway used to the existing method of working. Another main reason is the lack of trust about the new process as opposed to the existing process.

The resistance to change could be broadly analyzed using two levels, mainly- individual resistance to change and organisational resistance to change (Hinds, 2003). There are many sources for individual resistance to change, such as habits, security, selective information processing, economical factors and fear of unknown. It is said that human beings are naturally creatures of habit. There are numerous options and decisions to be taken every day. Concern for security is another factor that people are concerned with. Generally people are afraid of and likely to resist change because it threatens their feeling for safety. For example when Ford Australia introduced new robotic equipment many employees showed their dislike by not using the new equipment in the factories (Hellriegel and Slocum, 2009).

People could also think that change will lower their ability of earning as if they couldn't perform after the change process, especially when the pay is closely linked up with productivity (Baker, 1989). Change increases the uncertainty and in return increases

fear about the unknown. This occurs purely due to the lack of knowledge about the change process, its objectives and outcomes. Due to this very reason people tend to avoid learning about the whole change process and would be inclined to selectively gather information relevant to them. Selective information processing is where people tend to select and make decisions based on only what they like (Hellriegel and Slocum, 2009). This could mean that the individual will not see the full picture and only see what they want to see, increasing his or her level of resistance.

According to Kubler's (1969) framework there are five main emotional responses to change by an individual; denial, resistance, acceptance, exploration and commitment. Firstly any individual will deny and reject the change process. However, when change is communicated, workers start listening and contemplating about it. After a successful change training period they will accept the change and then begin finding out more about it which is then becoming the exploration stage (Fine, 1986). Once they are convinced about the entire process they commit towards implementing it (Tozer, 2012).

According to Hellriegel and Slocum (2009) six major sources of resistance are identified in an organisational context. Organisations have in built systems, structures and processes to prevent instability. When an organisation is faced with change structural inertia works opposite to restrain stability. Group inertia is where, as groups and teams, people have a set of common values, beliefs that they want to continue with. However, when faced with change these groups and teams may collectively resist in order to hold onto their existing ways of behaviour. Most of the times change is an inter-connected activity; a process cannot be changed in isolation. Many change programmes fail because of the fact that there is a lack of focus on the process and no proper planning being put in to it. Some groups may lose their competitiveness due to change. For example, when technology change is implemented mechanics and technicians in a factory might feel threatened with their jobs. Change process can influence the existing power and authority in making decisions. Naturally any worker will not like to dilute the existing power enjoyed. Change process can alter the existing ways of resources usage. Once internal employee groups are used to enjoying certain amount of resources, then naturally they will dislike any alteration made to this (Griffin and Moorhead, 2011).

Just like individual and organisational resistance to change there are instances where change barriers emerge from business managers themselves. Draft (1998) described several factors that trigger such issues:

Excessive focus on cost is one. When management are over focused on the cost factor, they might deliberately try avoiding change initiatives, thinking that these will increase the cost base of the company (Griffin and Moorhead, 2011). Failure to highlight benefits is another. This is another common issue that managers have which is again linked to the above point. When management fails to identify the actual benefits of change over short terms costs, they will not encourage the change process. Lack of coordination and co-operation is one more factor. Lack of coordination can also become a barrier to change as managers will identify the change process to be complex and they will be unclear of the process of achieving smooth organisational change. As indeed, uncertainty avoidance is another factor that managers seem to not encourage change in their efforts to avoiding uncertainty. Rapp et al (2011) argue that at the individual level, managers may be reluctant to take risks in implementing change processes.

3.7 ORGANISATIONAL CHANGE MANAGEMENT

Of course there are many theories and concepts written by many authors about change management using different arguments and perspectives. Kurt Lewin (1951) is one of the most famous authors who wrote and developed concepts about organisational change management. Lewin (1951) introduced the change process in three steps (Pasmore, et al., 2010).

- Unfreeze
- Change
- Refreeze

Unfreezing: This is the most important stage to understand in the world of change. This stage identifies as to how an organisation should get ready for the change, highlighting measures to be taken in order to move away from current stage, current comfort zones. This stage majorly tries to educate the importance and the necessity to change highlighting repercussions of not changing according to the current situation. The objective is to reduce possible employee resistance to change. When employees are aware of the change process and properly understand the importance of it, it becomes

easier to implement change initiatives. Once the employee mind-set is right for change then Lewin (1951) argues that managers should implement the second stage of the change process.

Changing/transition: This is the process where all change measures are taken on by the employees. This is the internal movement that results in reaction to a change. Once the employee minds are ready for the change, it is easier to implement the required change initiatives. This is the most challenging phase as even though people are well educated about the change process, there is always the possibility of people resisting the change when it is actually happening. Therefore, managers should take this phase extremely seriously as the success or the failure of the change process will heavily depend on the overall progress of this stage. Effective communication, support, demonstrating the bigger picture of the change is vital in this stage (Pasmore, et al., 2010).

Lewin (1951) further argues that managers should make sure that the driving forces are stronger than the restraining forces in order to push the organisational change into the desired level. In contrary, Lewin argues that managers will not be able to get to the desired status when the restraining forces are stronger. The force field analysis could be effectively used in the “Unfreezing” stage in order to identify the overall forces for and against the change process. This will provide useful information for change planners in identifying correct change strategies to put forward. In other words managers could find ways of discouraging restraining forces and encouraging driving forces in order to push the change process to the required stage (Pasmore, et al., 2010; Holt and Seki, 2012).

Refreezing: This stage is all about operating again with the changes incorporated. The main objective of this stage is to ensure the smoothness, stability and balance of the business operations with the changes already embedded. In this stage people will find new patterns, relationships and become comfortable with their new routines. This phase will consume time, however it is important to closely monitor to what extent people are actually practicing change initiatives learned. Sometimes even after successful change programmes there are instances where people still practice outdated work practices. Kurt Lewin (1951) stated the importance of emphasizing on “Force Field Analysis” which actually helps in identifying driving forces and restraining forces for organisational change (Pasmore, et al., 2010).

Driving Forces: These are a set of variables that actually influence positively the suggested change process. Factors such as new challenges on the job, increased rewards, increased operational efficiency, increased effectiveness, reduction of overhead cost could be taken as driving forces. It is important to see that driving forces emerge most of the time after the successful implementation of the change process. In other words these are good things that are expected to happen (Ageron et al, 2012).

Restraining forces: Restraining forces actually pushes the change process back and try to maintain the status quo. In other words these factors will try to highlight the difficulties of the change process and the convenience in staying with the existing system. Factors such as anxiety about the job, change looking less stimulating, unwillingness to take risk, fear of loss of power, status and authority are some of the restraining factors (Holt and Seki, 2012).

Peters in his (1987) book, 'Thriving on Chaos' highlighted the concept of constant change; he argued that the modest sized semi-autonomous, mainly self-managing team should be the basic building block of an organisation. The author believed that only organisations that subscribe to the idea of constant change will succeed. He maintained that this as the best way of getting closer to customers by providing them with a better service. One problem with this approach is that the notion of 'one best way' tendency dominates (Peters, 1988). Peters (1988) and other authors (Teece, 2012) who believe in the same school of thought argue that constant change is the only constant. In certain multinational companies senior executives are rotated every two years to prevent them building up local power bases and to encourage cultural blending.

Beer and Nohria (2000) developed a theory entitled 'Change through Balancing'. The authors argue that most of the change initiatives have failed in the world mainly due to lack of focus on central elements. They further state that rushing to change involves managers immersing themselves in details and loosing focus resulting in messy situations. They further explain that there are two options or perspectives available when looking at organisational change (Boonstra, 2008). Theory E: This is where the change process is designed mainly keeping the key objectives of an organisation in mind. For example in a commercial organisation the main objective is maximization of shareholder wealth. The change process can involve radical decisions such as staff redundancies, layoffs, cut downs on incentives, downsizing, restructuring, de-layering

etc. This is because the primary focus is preserving and achieving shareholder objectives. In other words shareholder objectives are preferred over other operational objectives. Theory O: This could be stated as the soft approach towards change. As opposed to Theory E, this theory looks in the perspective of employees. Employee objectives are preferred and taken into account in a change process. This involves obtaining ideas and feedback from employees, reflecting and making future changes with the support and the contribution from employees. Theory O tries to maintain a committed psychological contract with their employees.

The main disadvantage of Theory E is that it ignores the feelings and attitudes of their employees. No contribution is expected from the employees when it comes to implement a change process. Alternatively Theory O companies do take into account the feelings, ideas and thoughts of employees. Beer and Nohria (2000) state that rather than trying to use a single theory in isolation, organisations should try using a mixed version of Theory E as well as Theory O simultaneously and try to balance change process – and this is exactly what is meant by ‘change through balancing’. Of course, the continuous, a balancing act such as this requires an attitude of organisational learning.

Senge (1992) introduced the concept of the ‘learning organisation’. These organisations are the ones that continuously expand their abilities to increase the capacity and culture to become ‘learning organisations’. This could only be achieved by breaking the traditional model of control hierarchy, authority and bureaucracy where top management thinks and workers act in order to merge thinking and acting at all levels. Senge continues and further identifies five core competencies in building a learning organisation (Zbar, 1994). These can be identified as:

- Building a shared vision: This is to ensure that people are focused on a similar vision which is shared by the entire organisation. If there is no shared vision about the company you work for there will be no synergy in a crisis situation. Therefore, it is important to build a shared vision, values and beliefs within an organisation.
- Personal mastery: This is the process of encouraging individual creativity and innovation within an organisation. In a learning organisation mistakes are not punished, yet innovation is encouraged to obtain the long term benefit.
- Working with mental models: This is similar to the above point where people are given freedom to use their assumptions and to take risks in doing things differently.

The main objective is to encourage organisational learning and to create a learning friendly organisational culture.

- Team learning: It is extremely important to encourage teamwork as it actually gives a synergetic advantage as opposed to individual learning. Personal mastery has to be supported and accompanied by team work so that this could be practiced collectively, which will provide learning for more people in the organisation.
- Systems thinking: This is where the organisation gives greater emphasis on understanding the interrelationships rather than breaking problems in to small parts.

Kotter (1996) with his eight-step model has made a significant contribution to the area of organisational change management too. This model made its mark he presented it in his book 'Leading Change' where he illustrated eight steps for any change initiative. The first step of change initiative according to this model should be to create urgency of change by setting appropriate and tangible goals of change where the main aim would be to inspire the employees to sense the change. The second step should be to form a powerful coalition, i.e., building a team of change agents with the right people in the right place with the right mix of commitment, skills and emotional balance. The third step under this model includes activities such as creating and establishing vision and strategy, involving necessary emotional and creative aspects to drive service and efficiency. The fourth step asks for communication of the prepared vision to the workforce and earning their support through the quality of communication.

If through steps 1-4 the organisation succeeds in establishing a hint of change within the workplace, then the change agents can proceed to the fifth step that involves removing all types of resistance to change, ranging from theoretical to practical situations. After that, the sixth step would involve creating short-term wins and highlighting of the same as a precursor of the positive impact of total change.

After gaining the confidence of the workforce regarding the possible benefits of change, the change agent should take the seventh step, which involve facilitating the process of building on the change, which in turn would lead to the eighth and final step of this model, which asks anchoring the changes in corporate culture, such as recruiting appropriate employees or promoting the existing talents.

Kotter segmented the above steps into three phases such as preparing for change, managing change, and reinforcing change. He argues that management need garnering at least 75% support out of the total workforce, if change is to successful and this model would enable management to systematically attain the same by using the above steps. In essence, this model stresses on issues such as forming a powerful team of change agents, using vision as a campaign instrument to remove resistance to change and creating short-term win to showcase the same as the precursor of the change, before anchoring the change (Kotter, 1996).

Professor Moss Kanther of Harvard business School is another famous writer about organisational change and change management. In her book 'Change Masters', she clearly complaints about how modern organisations are hindering entrepreneurial thinking irrespectively of how important it is to managing change in an organisation. In line with the 'Excellence School' (Peters and Waterman, 1982) she emphasized the importance of employee involvement and empowerment, together with a discussion on the combination of managerial skills needed to change the culture and strategy of the organisation in order to be successful in their change initiatives (Kanther, 1983).

In the same work she identifies a number of typical managerial behaviours and policies that suppress innovative employee efforts. These are:

- Regard any idea coming from below with suspicion.
- Ensuring that people who require your approval go through several other levels of management approval prior to your approval.
- Asking departments or individuals to challenge and criticize each other's views.
- Expressing criticisms freely and withholding admiration.
- Controlling everything carefully and reducing free decision making.
- Highlighting the identification of problems as a sign of failure.
- Asking for justification when information or questions are asked.

However, she has also highlighted a number of ways in which organisational creativity could be encouraged. These are:

- Developing a culture that accepts change.
- Encouraging new ideas throughout the organisation.
- Increasing communication and interaction between staff members.
- Tolerating failure and encouraging experimentation.

- Linking creativity and innovativeness with a reward structure.

Hiatt (2006) suggests that effective management of the people dimension in a change management situation involves managing five drivers to change as shown here below and the initials of these drivers became the acronym of a model known as ADKAR.

- Awareness of the need to change.
- Desire to participate and support the change.
- Knowledge of how to change and what the change would look like.
- Ability to implement the change on a day-to-day basis
- Reinforcement to keep the change in place.

The ADKAR model Biech (2007) states that it is based on a concept such as aligning traditional change management activities to a set goal and it was initially introduced as a tool for determining the impact of change. However, in its new avatar as a change model it charts its course of action by trying to enhance the awareness of the employees regarding the reasons behind the proposed change. Accordingly it sets early communication with the workforce to convince them about the value of the proposed change and to generate eagerness among them to embrace the same.

After achieving the desired level of workforce awareness regarding the value of proposed change, the change agents require gauging the level of desire among the workforce by identifying any gap of knowledge among them regarding the necessity and benefit of the change. According to Hiatt (2006) this step helps the change agents to decide on the amount of knowledge required to pass on to the workforce to acquire the desired degree of workforce desire to change.

After identifying the knowledge and skill levels of the workforce, the change agents can proceed to evaluating the ability of the employees to perform their skills or acts on the required knowledge, since such evaluation would enable them to work on the drivers such as rewards, incentives, and encouragement, which are essential to reinforce and sustain the change (Hiatt 2006).

The above description shows that the ADKAR model adopts a series of sequential and interdependent steps to eliminate the main barriers of change, such as workforce ignorance about the benefit of change and which according to this model is the driver of

workforce premonition regarding change which usually culminates into resistance for change. In the process the ADKAR model defines change in two dimensions such as the business dimension (vertical axis) and the people dimension (horizontal axis), while suggesting that successful change would take place when both dimensions would occur simultaneously (Hiatt 2006).

The business dimension of change under this framework involves identification of a business need or an opportunity, defining their scopes and objectives, designing business solutions in the shape of new processes, systems and organisational structures, which it intended to be developed and finally engage with implementation (Biech, 2007). The people dimension includes the series of actions under change process that involve management, workforce, customers, and marketplace. Altogether the proposed mechanism of ADKAR leads to the impression that it aims to act as a step-by-step support system for change leaders in obtaining the desired outcome.

Greiner (1972) introduced the 'Organisational Growth Model' where he identifies organisational change through organisational growth. He argues that change is an inevitable factor and organisations who are thinking long term will have to definitely grow in order to sustain their existence. Therefore Greiner's growth model describes how the organisational change is reflected through each phase of organisational growth. There are six phases in this model where in each phase managers will have to adopt a different strategy in managing change and employee behaviour. For example in the most initial stage managers should encourage creativity and then in the next stage should point workers in the correct direction. Merson (2011) explains that within the model Greiner identifies 6 types of crisis situations. Namely; crisis of leadership, crisis of autonomy, crisis of control, crisis of red tape, crisis of growth and crisis of identify. Crisis is referred to as the main challenge that a manager should expect in each stage of growth due to organisational change.

Continuing with Greiner, he further states that each of the dynamic evolutionary growth stages eventually creates a situation of revolutionary crisis, when the organisation's existing ways of doing things are no longer productive. Also it is inevitable that organisations face revolutionary phases as well as evolutionary phases within its life cycle. The idea of the model is that if managers can find ways of overcoming each crisis, then there will be an opportunity for growth. Failure in doing so will hinder the opportunity for growth (Merson, 2011; Nuaimi, 2013).

Nevertheless, like any other model or framework, there are advantages as well as disadvantages in using Greiner's growth model when managing organisational change. The advantages are that the model provides a systematic and stepped approach to managing change because it highlights each area to be addressed and it enables managers to develop focused strategies to overcoming challenges in each change situation. Also the model identifies change through organisational growth. This enables managers to identify correct growth strategies along with measures to managing organisational change according to expectations. Further this is a model that believes in organic growth where typically profits are re-invested in business in the growth process and associated requirement for change is understood. The disadvantages are that there are also a number of limitations associated with this approach. The model assumes that growth happens in a linear and a consistent manner where actually there could be number of influencing factors that will negatively affect the smooth flow of growth. The model also does not provide provisions in managing change that could be expected during organisational decline (Merson, 2011).

Burke and Litwin (1992), the proponents of Burke-Litwin Causal Model of Organisational Performance and Change (popularly known as the B-L Model) include 12 theoretical constructs to distinguish between the culture and the climate of an organisation, in order to distinguish between transformational and transactional dynamics, and to specify the nature and direction of influence of organisational variables. In defence of the organisation in their model, Burke (2002) in another study further argues that change is seldom linear and instead it is more often represented in an upward spiral that accounts for both regression and growth. And, Anderson (2011) adds that in the process the model is helped and complemented by previous change models, empirical studies, and practices and hence it becomes more complete.

Anderson (2011) in defence of the B-L model continues and states that it visibly contains some striking features. For example, the first feature of the above explanation is that Burke and Litwin (1992) clearly distinguish between culture and organisational culture by presenting them as culture and climate, where climate acts as an indicator of individual perception regarding workplace functioning and culture provides the macro vision by involving several values and beliefs pertaining to the social system engulfing the workplace and everything around it.

The next feature is that it accommodates both transactional and transformational dynamics and places them in a manner so that the transformational dynamics remain close to leadership factors and transactional dynamics remain close to management factors. Alongside, the proximity between leadership factors and macro vision of culture fairly suggests that it intends to facilitate the leaders in exploiting culture and values that are key drivers of intrinsic change. Similarly, the proximity between management and climate, i.e., individual and group issues suggests that this model enables management to closely deal with climate issues that often involve transactional behaviour (Burke, et al., 2008).

The structure distribution of the B-L model shows that it divides the change processes into two segments, where the leaders are asked to deal with three important areas of change such as external environment, mission and strategy, and culture, while management are asked to look after structure, climate, and systems. Thus from the perspective of this study it can be said that the B-L model recognizes the significance of assigning the leadership to intrinsically change the employees and assigning the management to extrinsically change the employees (Burke, et al., 2008).

Going back to the resistance to change aspect, Thomson (2010) states that in the study of Kotter and Schlesinger (1979) six main methods of managing resistance to change are identified and discussed. These are:

- Education and communication: This is useful when the basic change problem is caused due to lack of information and knowledge. It is believed that this approach helps people understand the change process and eventually targets obtaining support towards the change process. However, this could be very time consuming and might not work for lower level employees.
- Participation and involvement: This is more of a practical approach towards change as this tries to increase the probability that people will be committed to a change process. Ideally, this could be implemented after education and communication. Excessive time consumption would be a disadvantage of this method.
- Facilitation and support: This is where techniques such as training, counselling and group discussions are used. Ideal to use when the principal reason for resistance is insecurity and adjustment issues.

- **Negotiation and agreement:** Mainly considered in scenarios where a group clearly stands to lose out in some way because of the change. This method is again important especially when the group has a considerable power to resist the change. The main problem in this method could be cost and the fact that other groups could also try negotiating after seeing this method.
- **Manipulation and co-optation:** Manipulation is where managers providing partial or misleading information to the people who are unwilling to accept the change process. Co-optation is where identifying key individuals resistance to change and “buying them off” by providing succession opportunities, upgraded designations etc. Main problem here is the potential future issues that could be expected after providing partial and misleading information.
- **Explicit and implicit coercion:** This involves use of force, threat of force to enforce the required change initiatives. This could be justified and used when faced with parties having unreasonable arguments and resisting simply to avoid the change process from taking place. However, this method is deemed to have ethical as well as legal issues.

3.8 THE ROLE OF LEADERSHIP IN CHANGE MANAGEMENT

From the early days of the inception of management concepts, leadership theories were also discussed in parallel, and soon diverse schools of thought in leadership theories have emerged. Early theories on leadership were more focused on characteristics and behaviour of leaders but latter theories focused on the behaviour of followers and the context of the situation where theories are expected to be applied (Gosling et al, 2003). A review of the leadership literature reveals an evolving series of schools of thought from ‘Great Man’ and ‘Trait’ theories to ‘Transformational leadership’. Table 2.1, illustrates the key characteristics of each of these schools of thought.

Table 3.1: Key theories in leadership

Leadership Theories	Comments
Great Man	Based on the belief that leaders are exceptional people, born with innate qualities, destined to lead. The use of the term 'man' was intentional since until the latter part of the twentieth century leadership was thought of as a concept, which is primarily male, military and Western. This led to the next school of Trait Theories.
Trait	The lists of traits or qualities associated with leadership exist in abundance and continue to be produced. They draw on virtually all the adjectives in the dictionary which describe some positive or virtuous human attribute, from ambition to zest for life.
Behaviourist	These concentrate on what leaders actually do rather than on their qualities. Different patterns of behavior are observed and categorized as 'styles of leadership'. This area has probably attracted most attention from practicing managers.
Situational Leadership	This approach sees leadership as specific to the situation in which it is being exercised. For example, whilst some situations may require an autocratic style, others may need a more participative approach. It also proposes that there may be differences in required leadership styles at different levels in the same organization.
Contingency	This is a refinement of the situational viewpoint and focuses on identifying the situational variables which best predict the most appropriate or effective leadership style to fit the particular circumstances.
Transactional	This approach emphasizes the importance of the relationship between leader and followers, focusing on the mutual benefits derived from a form of 'contract' through which the leader delivers such things as rewards or recognition in return for the commitment or loyalty of the followers.
Transformational	The central concept here is change and the role of leadership in envisioning and implementing the transformation of organisational performance.

It is clearly evident from the vast amounts of literature that the field is proliferated with studies about leadership and the role of leaders in change management. James Clawson (2001) points out that change is what fuels leadership and that true leaders ‘understand, embrace and lead change’. They use communication skills, as well as charisma, symbols, and other strongly emotional devices and are driven by the ambition to arouse and encourage people so that others would obey them (Alvesson and Sveningsson, 2003).

According to O’Reilly et al (2005), workplace leadership pertains to the ability of a person in a formally assigned hierarchical role to influence a group to achieve organizational goals. An effective leader: (1) articulates the unit’s vision, (2) sets a strategic direction, (3) defines measurable objectives based on specified strategies, (4) aligns the reward system, (5) motivates subordinates, and (6) effectively deals with resistance to change. Thus, a leader Weber (1998) states that understands his or her institution in terms of seven important factors: strategy, structure, systems, goals, style, personnel, and skills.

O’Reilly et al (2005) continue and identify several factors that influence leaders and change management. These include ‘tenure’ in leadership role, effective communication, managerial and employee support, and allocation of vital resources are also critical to ensuring a leader’s success in affecting and effecting change(s) in the organization.

Alvesson and Sveningsson (2003) further note that employee morale improves when those in authority listen to their subordinates and treat them with respect. These daily interactions, together with business operations, corporate rules, bureaucracy, and other aspects of running an organization comprise a pattern that is somehow unique to every institution.

Such pattern is what Edgar Schein (1985), cited in Harder (1999) referred to as organizational culture which is transmittable so that incoming members could adopt the correct way to perceive, think, and feel while they work for the organization. Thus, leaders and managers would have to be conscious of this culture as this could influence the organization’s adaptability to change – Latta (2009) also concurs.

The theory of transformational leadership proposed by Bass and Avolio (1994), cited in the of Wodak et al (2011), involves a leader's capability to communicate ideals, inspire corporate identity, provide critical insights, and consider the needs of others.

Carlyle- Garrick (2006) says that the basis of the trait theory emerged from the great man theory. When leaders are practising leadership critical leadership qualities are illustrated and observed by others, and therefore, people can learn from those or people with these qualities could be hired. This theory also goes on discussing the importance of having necessary skills for a leader along with leadership traits. Stogdill (1974) identified leadership traits as well as necessary skills that an effective leader should possess. Some of the main leadership traits identified are by this theory are adaptive nature to the situation, sensitivity to the environment, cooperative, assertive, decisive, dominant, energetic, self-confident and ability to manage in stressful situations.. In addition, some of the most key skills of a leader are identified as being intelligent, creative, diplomatic, organized, persuasive and possession of social skills (Greenberg, 1994).

The behavioural theories of leadership include a number of authors, including the work of Lewin, as discussed earlier. The managerial grid developed by Blake and Mouton (1964) identifies the styles of leadership and managers using two parameters, namely, concern for production and concern for people and employees. Depending on the degree of priority given they have also identified five leadership styles. These are country club, impoverished style, middle of the road, team management and produce or perish. According to the authors the best leadership style to be adopted is the team management style where leaders give highest concern for both production as well as employees. Lussier and Achua (2009) argue that the worst style to be adopted is the impoverished style as workers are not impressed by that at all.

Lewin (1939) in his work identified three leadership styles, namely, Autocratic, Democratic and Laissez faire leaders. In the autocratic style, leaders make decisions alone without consultation with subordinates. This is effective when decision making does not require a collaborative, cross functional expertise and where the decision is not likely to change as a result of any subordinate input. In this style the subordinate contribution is minimal and motivation levels are low. In the democratic style, leaders ask for subordinate participation and contribution to the decision making process.

However, the final decision will be taken by the leader. This style of leadership is appreciated by subordinates and they feel that their contribution is appreciated. Of course, one issue that becomes obvious with this style of leadership is that the decision making could take longer to be made because of the number of opinions and options put forward. Laissez Faire leaders are given maximum empowerment and authority to their subordinates in the decision making process. This particular style of leadership provides subordinate freedom in decision making and could be seen as a high motivator for employees. The main disadvantage with this style is that a possible lack of monitoring of employee input may lead to inappropriate decisions (Lussier and Achua, 2009).

Behavioural theories identify how leaders generally behave in day-to-day operations. However, it is obvious that no two situations are the same and one leadership style may not help leaders in succeeding in different situations. Hence the situational or contingency approach favours leadership in accordance to the situation encountered and explain that leaders should act in line with the given situation (Bolden, et al., 2011).

Fielder (1967.) emphasizes in his study the need of leaders to be adapting their style in line with the situation to be dealt with in his contingency model. He states that different situations create different leadership requirements, and based on that, leaders will have to develop relevant strategies - and highlights three specific situations that could be used in defining a given situation.

The first is the leader member relations. This is referred to as the relationship between the leader and the subordinates. If the relationship is strong then it is easier to obtain subordinate support in a given situation. The second is the task structure: This is identified in terms of the complexity of the given task, or task at hand. Position power is the third and it is the amount of power and authority that a leader is being given in an organisation. This is particularly important in the decision making process which usually becomes a key factor for success.

Fielder further states that there is no good or bad leadership style but rather what it is appropriate in a given situation. Hence the leadership style to be used will depend on the personality of the leader and most importantly on the situation faced within. For example task oriented leaders could be best in sales and relationship oriented leaders

could be best in managing consumer relationships. Therefore, the leadership style to be used always depends on the given context of a situation (Bolden, et al., 2011).

The Blanchard model (Blanchard, 1993) also takes a situational approach towards leadership. This particular theory takes into consideration organisational direction and tasks to be completed in line with that direction. This is also referred as task behaviour. In addition, it takes into account the type and level of relationship behaviour between members and the level of maturity of subordinates. Task behaviour is where leaders allocate tasks to subordinates with instructions for completion. This reflects only a one way communication. Relationship behaviour is based on a two-way and/or multi-way communication of leaders with subordinates. This includes listening, supporting, facilitation and so on. The level of maturity dimension is about the leader's confidence about individual subordinate's ability to completing the given tasks on their own with little supervision. The assessment of individual maturity usually depends upon aspects such as type of task, complexity, prior experience, local support and other relevant factors in relation to what and how it needs to be done. In a nutshell a leader's behaviour could be categorized under two broad sections; directive behaviour and supportive behaviour. Directive behaviour is based on a one-way of communication, it is usually associated with autocratic management styles and followers follow strict instructions. The supportive behaviour approach, on the other hand, is based on open communications and employee empowerment as well as relevant support to enable the individual to complete the task.

Shrinberg (2010) concurs and adds that based on these two variables, four leadership paradigms have emerged; delegation, supporting, coaching and directing. Nicholson (2009) explains that transactional leadership is a style of leadership that is based on the setting of clear objectives and goals as well punishments and rewards in order to encourage compliance.

Lussier and Achua (2004) state that researchers earmark this style as the leadership of stability and it aims at maintaining stability through regular economic and social exchange rather than by promoting any change. Bryant (2003) underpins three distinctive features in this style. The first is that transactional leaders formulate a common organisational goal with their followers, they then exchange rewards or

promises of rewards to get the job done and finally they respond to the immediate self-interests of the workers during the process of achieving the goal.

However, a number of researchers (Barnett et al, 2001; Gellis 2001; Jung and Avolio 1999) observe that because this model carries both rewards and punishment using extrinsic rewards like money or gifts to gain control over the followers it is prone to exploitation of the reward system to the benefit of the leaders. Brown and Moshavi (2002) further argue that the individual goals of the leaders and the followers under this style grow different, since this style influences leaders as well as the followers to achieve material gains as much as possible by exploiting all available scopes such as rank and job specification.

This observation thus suggests that money and rank are the main drivers of transactional style where followers respond with compliance and leaders respond on the basis of organisational and individual achievement. Interestingly, this assumption gets further consolidated when one learns that the Leader-Member Exchange (LMX) theory, an improved version of the transactional model (Dansereau et al, 1975) suggests that leaders form a satellite group with chosen followers and allow them to enjoy privileges over others.

Yukl (2003) evaluates this style from a different perspective. He infers that this style appears to be a moderated version of the autocratic style at its initiation stage where it adopts a flexible approach such as seeking suggestions from the followers in the decision-making process. This happens before becoming more flexible at the LMX stage and thereby recognizing the ideas of the followers and further democratizing the process (Nicholson, 2009).

On the other hand, transformational leadership is where a leader identifies the needed change, creates a vision to guide the change through inspiration, and executes the change with the commitment of the members of the group. According to Burns (1978) and Bass (1990), a transformational leader acts as change agent and he motivates followers by appealing to their ideals and moral values to do more. Transformational leaders look to inspire, to set direction and vision, to empower subordinates to participate and take the initiative in changing the organisation. According to Bass and Avolio (1994) this style involves a leader's capability to communicate ideals, inspire

corporate identity, provide critical insights, and consider the needs of others (Martin, 2006).

Transformational leaders are also charismatic leaders that lead, inspire, and improve behaviour and productivity. They encourage followers to develop all round ability, to derive more satisfaction from their jobs, to be effective in getting the job done, and to increase organisational productivity (Bass 1985, Tucker and Russell 2003). Howell and Avolio (1993) also endorse the above view by saying that these leaders take a real interest in the wellbeing of their employees and they possess the power of convincing the employees regarding their intentions.

Babcock and Riley (2012) states that a transformational change programme is likely to have the following key characteristics; it is likely to be a long term initiative that will extend across various business strategies, leadership and economic cycles; it requires a vast amount of integration through various portfolios and projects, and it requires strong mutual cooperation between various departments, functions, business units and geographical locations.

Chapman (2002) concurs and adds that due to its disruptive nature of transformational change, it is necessary that organisations have a well-planned system of change or transformation in place. A set of processes, activities, defined roles, planning and implementation are necessary if a transformational change is to be realised with optimum resource allocation and with little hindrance to the routine activities of the organisation.

Like human beings, all organizations go through changes. Change, as discussed earlier, is the only constant in life and it is a permanent feature of reality. However, unlike individuals who deal with the impact of change on their own, such is not the case in organizations where bureaucracies rule. These hierarchies are composed of leaders, managers and subordinates whose tasks are designed to run organizations. Change in the workplace then affects groups of people and their collective performance. In this context, managing change is a challenge that leaders and managers in any organization should address (Vaccaro, 2012; Ansari, 2012)

Schein and Greiner (1977) cited in Warner Burke (2011) and Dajani (2011) describe the vulnerability of organizations as 'behavioral diseases' in bureaucracies. These include functional myopia and sub optimization, top-down information flow and problem insensitivity, and routine jobs and dissatisfaction. Burke (2011) views organizational development, also sometimes refer to as organizational development and change, as the 'antidote' to resolving workplace issues including how to manage organizational change. The primary actors of organisational development and change are the 'change agents'. These are the leaders and managers responsible for change including their consultants whether internal or external. These people are examining existing organizational culture in order to handle, implement, and/or sustain change. Burke (2011) posits that analyzing workplace culture can lead to identifying areas which could cause resistance or failure to adapt to change.

3.9 IMPLEMENTING CHANGE

Evans (2004) and in agreement with others (Kennerly and Neely, 2003; Vaccaro, 2012) state that implementing change in an organization is not an easy task and it can only be achieved if leaders and their change agents are able to manage the impact of these changes accordingly. Evans (2004) further says that organizational change management pertains to all of the actions required in an organization in order to understand, prepare for, implement and take full advantage of the desired change.

Such process needs to have a good plan and should improve the organization's change management efforts. It should also give attention to the people who are the real agents of a successful workplace transformation and whose performance of various tasks contributes to a firm's return of investment (Evans 2004; Ansari et al, 2012).

To minimize resistance, according to Maltz (2008), organizational actors should understand their dynamics, as well as the shifts in role, task and authority boundaries whenever change happens. Evans (2004) continues and suggests that leaders need to secure the support of senior management. He also conveys that they should identify a champion who can articulate the reasons for and advantages of the change. Furthermore, a realistic plan should be created based on the vision of the specified change initiative.

Evans (2004) and supported by Babcock and Riley (2012) state that communication, education, relevant capabilities and structural modification are integral to change management and they also argue that it requires focus and discipline. Babcock and Riley (2012) further maintain that discipline will prove a very crucial element in the process of transformational changes.

3.10 ORGANISATIONAL CAPABILITIES AND COMPETENCIES

All managers want their businesses to succeed, and in order to do this, they will use various means of gaining a competitive advantage (De Marchi, 2013). When it comes to gaining a competitive advantage, what is required, simply put, is to satisfy customer needs and exceed their expectations in comparison to competition at the market place (Killen et al, 2012; Ansari et al, 2012) by managing internal processes, systems and staff to develop an appropriate set of capabilities and competencies (Teese, 2012). By combining these two Ulrich (1990) states that organisations are able to succeed from inside-out.

Organisations today operate in an increasingly competitive environment that is rapidly changing, and in order to stay abreast of what's happening and competitive, organisations both public and private alike are required to have the necessary capabilities and have the know-how to appropriately use them (Schienstock, 2009). When it comes to change management and organisational capabilities, it is understood to be a continuous and open-ended process (Teece, 2012; Mohrman and Lawler, 2012).

There is no distinct definition of what organisational capabilities are, however, Dosi et al (2003) suggest that a basic way of understanding this would be to take the capability view, which refers to the ways an organisation does things and deals with organisational problems and shows aspects of continuity.

Leonard-Barton (1992) identifies it as the knowledge set that distinguishes an organization and provides competitive advantage. However, capabilities differ from one organization to another. Since firms are heterogeneous, they have their own uniquely developed routines even if they are operating in the same industry and sell similar products and services in a similar manner to the same target groups. These unique ways of acting and responding are identified as the capabilities of an organization that

accumulate over a period of time. Therefore, these capabilities Dosi et al (2000) state are historic.

The latter is contrary to what Porter (1990) suggests, that organizations can create opportunities based on their capabilities. It is argued that it is actually the opposite; organizations identify opportunities and allocate resources that determine their capabilities (Schienstock, 2009). Dosi et al (2000) continue that the ability an organization has to allocate adequate, correct and timely resources to create competencies eventually become capabilities.

At a fundamental level, organizational capability is the ability to manage people to develop a competitive advantage (Ulrich, 1990). The same author with an associate (Ulrich and Lake, 1991) further argue that it can be seen as the ability to establish internal structures and processes that influence its members to create specific competencies and thus enable the business to adapt to changing customer and strategic needs.

Therefore it can be said that capabilities are not only about managing people (Burgoyne, et al., 2004) but also about how an organization implements policies and procedures to develop and sustain employee commitment of which it, again, leads to employee engagement as a key means for developing capabilities (Sandhya and Markos, 2010).

Traditionally organizations have used financial, technological and strategic capabilities as the means for gaining competitive advantage (Ulrich and Lake, 1991). However as many would argue (Hamel and Prahalad, 1996; Teece, 2012; Berkhout, 2012), these are not sufficient in today's world to gain and sustain a competitive advantage. Organisational capabilities are the most difficult to imitate or copy, therefore they can be identified as the most efficient form of sustaining a gained advantage. Financial capabilities can be duplicated if competitors are able to reduce costs or gain access to capital (Ulrich, 1990). Strategic capability is copied most often as strategies are analysed and replicated (Burgoyne, et al., 2004). Technological capabilities will hold out for longer. However, these too will be copied as competitors gain access to the same technologies (Reichert, et al., 2011). Replicating, or copying, however organisational capabilities is more difficult and complex as it requires much more in-depth actions to be taken by organizations and not just surface level changes.

Attempting to copy an organisation's capabilities requires managing costs and capital, developing products, purchasing technologies but also changing perceptions among employees, which would be most difficult and time consuming. To change individual perceptions and job performance is not an easy task and it is never a one-step action (Ulrich, 1990; Oxtoby, et al, 2002).

The development of organizational capabilities encompasses a number of areas. The first is a shared mindset. This involves people both inside and out of the organization creating a shared mindset when it comes to goals and how they should be attained. Therefore a key capability would be creating this shared way of thinking (Ulrich, 1990).

The second is management and human resource practices. Managers within an organisation have the tools to influence how people within and outside the organisation think, feel and behave. Therefore, management and human resource practices have an important role to play when it comes to developing these capabilities in an organisation. Human resource management play a major role in developing competencies through recruitment, effective communications and reinforcement of requirements through appraisals and rewards systems (Vaccaro et al, 2012).

The third is the capacity for change. Organizations that are flexible and ready for change are more able to develop capabilities. This ability to change is driven by individuals being empowered and being able to influence others. Therefore having capacity for change would mean that management identify and make ready the organisation for change (Graetz, 2000).

The fourth is the element of leadership. Individuals at all levels of the organisation are required to provide the leadership that is required for capability development. Leadership skills should be developed at all levels and not only be limited to senior level managers (Vaccaro et al, 2012; Berkhout, 2012).

Another view on capability development is as a combination of innovation and the flexibility gained by combining expertise in strategic direction, organisational structure and the knowledge, expertise and competence of individuals in the workforce (Gill and Delahaye, 2004). Therefore according to this view, the following three areas are important for developing capabilities.

The first area is the organisational Strategic intent. This focuses on the strategic direction of the organization in relation to the resource based theory (Barney 1991; Grant 1991). It looks at human resources as an intangible asset and argues that, in developing strategic direction an organisation must first evaluate its human resource capabilities rather than developing, a strategic direction first and then trying to develop capabilities (Prahalad and Hamel 1990; Pavitt 1991; Teece, Pisano et al, 1998).

The second area is organisational structures. This focuses on human resources in order to develop strategies and processes that enhance the possibilities of developing competencies and thus capabilities. It highlights the importance of developing meaningful job roles and guided performance management procedures, which support and reinforce competencies, organisational learning, flexibility, and organisational change (Brannick and Levine, 2002; Delahaye, 2000).

The third area is individual Knowledge. Every employee comes with a unique set of skills, knowledge and abilities. Therefore, organizations need to identify and develop them to suite current work requirements, as well as future needs (Sandberg 1994).

The other aspect is the notion of competencies. Similar to capabilities, competencies are too a fuzzy topic and there is no a globally accepted definition. However, Spencer and Spencer (1993) attempted to define the notion as the underlying characteristic of an individual that is causally related to criterion-referenced effective and/or superior performance in a job or a situation, and Vos et al (2011) are in agreement.

Prahalad and Hamel (1990) are of the view that organisations are able to create a small amount of underlying competencies that give them the edge, or competitive advantage, in the environment. This Murray et al (2006) state that it is the means by which a sustainable competitive advantage can be attained

The question is how are competencies developed and what competencies are required by employees in order to contribute to organisational capabilities. Kuijpers (2003) states that there are three important types of competencies, which employees in an organisation should possess. The first is functional competencies, which are identified as skill and knowledge required to successfully performing a job. The second is the learning competencies, which are identified as the ability an individual has to learn and

develop new functional capabilities. In a knowledge economy, ability to learn plays a major role and it is a key driver of organisational flexibility, Lindley (2002) adds. The third competency is the individual characteristics of the employee that guide them towards the right direction in the context of the tasks to be completed.

Heinsman et al (2006) describe competency management as an important human resource tool that is often used within organizations to guide human resource practices such as selection, assessment, career management, employee development, and performance appraisal. The author identifies competency development as a form of management. The former is also highlighted in the work of Forrier et al (2009) where they articulate that an important feature of competency-based management encompasses all activities carried out by the organization and the employee to maintain or enhance the employee's functional, learning and career competencies.

However, Nybo (2004) points out that most researches are limited in identifying competency development as training and formal education only at large and they fail to fully realise other human resource practices, strategies and policies that can have a stimulating effect on competencies. Evidence from others (Van der Heijden et al, 2009) suggest the importance of on the job training, appraisals, career management and advice as being equally essential human resource practices that are also important for competency development.

In addition, Murray et al, (2006) highlight that studies on competencies, mostly focus on the individual alone and only few understand the importance of linking competencies of employees to the overall development of the organisation (Berkhout, 2012). Investing and developing individual competencies without looking at the contribution it can bring to the overall strategic direction of the firm creates problems. The main cause for this it seems, as pointed out by Fingold et al. (1998) is that the strategy-based view of organisational capabilities being very different to that of individual competency approach, which is mostly rooted in human resources.

Individual competencies are considered bottom up and focused on the work based abilities of individuals. Since it is focused on the individual, this individual approach to competency development is considered far better at enhancing performance than the wider organisational competency approaches (Murray, et al., 2006).

As Fingold et al. (1998) state individual competency development is thus directly linked with the human resource function of organisations. Thus it can be said that the human resource function is credited with being the core stimulation for developing individual competencies.

Though these types of competency-based models are important, they have been criticised for being too static and based on historical achievements rather than future needs. However there is general agreement on some competencies that are important and required in most cases, such as interpersonal skills, analytical techniques, business and organisational knowledge (Murray, et al., 2006). Nevertheless, more recent studies indicate the need of building competencies of learning and change (Morhman and Lawler, 2012)

The capacity, or the ability, an organisation has to be flexible in itself is an important capability. A key indicator of having capacity for change is ability an organisation has to reduce the cycle time on all of its activities. Ulrich and Dale (1991) provide several principles in determining if an organisation is ready for change or is able to successfully implement change.

The first is 'symbiosis', also known as 'building a bridge' and it refers to creating an alignment between the prevailing conditions of external environment and the internal capabilities of the organisation. This means that the organisation has to develop such competencies to match the external rate of change. The second is 'reflexiveness' and it is concerned with organisational ability of learning from past experiences. Managers who have this capability are able to carry out self-assessments and are able to experience continuous learning. Having such managers in an organisation is critical for success as they are better able to appreciate the need for redesigning tasks, structures, processes and systems in response to external change. The third principle is 'alignment' and it is focused on the ability an organisation has to integrate and align different tasks, structures, processes and systems at technical, political, cultural levels. The fourth and final is 'self-renewal' and it involves the capacity for change that is not limited to one event alone but rather it is continuous and long run. For this to take root, bureaucracies and hierarchical structures will have to be fostering employee engagement and facilitate empowerment and motivation to learn and change.

Going back to the notion of capabilities, the knowledge-based view and resource-based view are some of the most key concepts in the field (Schienstock, 2009). The capability-based view is allied with that of the knowledge-based view in an organization. The resource-based view identifies an organization as an administrative entity that consists of collecting and processing resources both human and physical (Curado, 2006). These resources are able to be disposed of as the organization determines to achieve its various goals and objectives. Therefore, it can also be said that it is equally linked to the knowledge-based view (Curado, 2006). This particular perspective is also supported by Grant (2007) where he states that it is now accepted that the knowledge-based view is closely linked, and is an extension, of the resource-based view.

The changes witnessed in the contemporary economy have created a host of knowledge workers from material-based production and information-based production (Curado, 2006). Most importantly we find that knowledge-based workers are the core of an organization and its functions (Child and McGrath, 2001; Morhman and Lawler, 2012). Many firms agree, be it public or private, that they need to be knowledge-based. However, Curado (2006) continues and highlights that few actually know what it is and how to become one.

This is where, perhaps, an additional platform for change management also comes in. To be knowledge-based requires an organization to change its current way of thinking and acting. However, though the need is identified, few understand the range and length of change required to go from a resource-based to a knowledge-based organization (Nuami, 2011).

Many organisations mistake knowledge-based approaches to that with product and service knowledge. However as in the iceberg theory, the product and service knowledge is only on the surface; core attributes of knowledge are hidden within, and ingrained, in the culture of an organisation (Balogun and Jenkins, 2003). Therefore it is not simply about the outputs of the organisation that are considered as knowledge but it is the values and the cultural artifacts that create a knowledge-based organisation (Curado, 2006).

Organisational learning is what allows a firm to acquire, change and to preserve its organisational capabilities (Cook and Yanow, 1995). This is what continuous learning is and it has to be facilitated by the culture of the organisation. And as discussed earlier organizational culture is mostly defined as a set of assumptions and beliefs held in common, and shared by members of an organisation, or as shared beliefs and knowledge (Schein, 1985, Apub et al, 2003).

Organisational culture, in other words, can be identified as knowledge that is engrained within the organization as a result of past actions, patterns and recopies used for certain situations (Balogun and Jenkins, 2003). Therefore throughout a course of operations an organization is said to be having knowledge-based routines on past actions (Winter, 2003).

The strategic management literature points out clearly that more than tangible capabilities, it is the intangible that determine sustainable competitive advantages (Rouse and Daellenbach, 1999; Gonzalez-Loureiro and Pita-Castelo, 2012). It is clear from research that intangible resources play an important part in an organization and that they have a very positive impact on the competitive position of an organization (Hannes and Fjedstad, 2000). The intangible resources help to sustain competitive advantages, as they are generally rare and socially complex (Barney, 1991; Peteraf, 1993). Intangible capabilities or resources are nonmonetary assets that present no physical existence, and are used in the production of products and services, or are rented to others or are applied in administrative routines (Reinhardt et al., 2003).

Going further it is clear, given that the literature is proliferated with studies that point out that superior knowledge is associated with organisational learning much more than superior performances (Senge, 1990; Garvin, 1998; Morhman and Lawler, 2012). Miller (2002) further argues that competitive advantage too can be determined based on differences in knowledge inventories within competing firms. A superior knowledge base, therefore, can be directly linked to higher strategic flexibility and faster reaction to environmental changes (Grant, 1996; Volberda, 1996). Therefore, it is safe to say that knowledge is the most important asset or capability an organization can process (Umemoto, 2002; Morhman and Lawler, 2012).

The most important aspect knowledge-based organisations have are their abilities to integrate so that that they can alter their capacities in order to meet changing internal and external environment conditions (Teece et al., 1997). In order to create and sustain competitive positioning it is understood that knowledge-based competencies are key (DeNisi et al, 2003). Therefore, it all comes down to individuals within a firm - the knowledge workers. Superior talent and thirst for learning is what creates competitive advantage for organizations Hiltrop (1999) argues.

Capabilities and capacities are built over a long period of time and are hard to imitate (Blackler, 2002) hence enabling sustainable advantages (Rugman and Verbeke, 2002). To replicate the routines that are built over a time period will be very difficult and expensive, thereby, discouraging others (Winter and Szulanski, 2002).

Another positive aspect of knowledge-intensive firms is their ability to leave out formal structures and achieve coordination through social rewards and internal normative systems, instead of a hierarchical control (Curado, 2006; Nuaimi, 2013).

Employee engagement, clearly, is one of the most important aspects in organisational life and it can be said that it is the harnessing of organisational members to perform at their best. According to Kahn (1990) employee engagement is manifested in numerous ways such as physically, cognitively and emotionally. The physical aspects are at large given according to the tangible resources an organization has at its disposal. However, when it comes to the cognitive aspects, employees are more concerned with the attitude of their leaders and the working conditions in the organisation. In terms of emotional aspects, employees are more concerned with how they feel about their organisational leaders, their management skills and the work conditions (Sandhya and Markos, 2010).

Employee engagement is an important aspect in improving individual and thus organisational performance. Engaging employees has become equally important as a means of competency development as enhancing performance is about developing competencies (Sandhya and Markos, 2010).

However, a key question to ask is what has driven employee engagement as a key concept? According to Penna (2007), employees increasingly want to work for an organization that gives them extra meaning and allows them to actively contribute.

Therefore, it can be seen that employee engagement creates benefits for employer and employee at the same time. To the employee it will provide the means to be part of something meaningful and bigger than themselves, while providing a motivated workforce for the organisation that is empowered and ready to follow its strategic direction.

Studies have found that companies investing in employee engagement has benefitted largely in terms of employee retention, productivity, profitability, customer loyalty and safety (Sandhya and Markos, 2010). Baumruk and Gorman (2006) articulate that companies with engaged employees tend to have the following behaviours; employees advocate the company and co-workers, they have an intense desire to work for the company and they strive to put in the extra effort to contribute to the success of the business.

This is very important if the organisation is to successfully implement a change programme because disengaged employees are likely to resist change more and are more likely to be a stumbling block along to way of the progress. As White (2006) identifies disengaged employees are likely to be wasting their talents on tasks that do not matter, will not show full commitment and will not be willing to go through change processes for the future success of the organization. According to Vance (2006) the greater an employee's engagement the more likely they will happily 'go the extra mile' and deliver excellent on-the-job performance.

In much research that has been conducted on change management, it is clear that employee engagement becomes a primary function (Sandhya and Markos, 2010). For example research by Schmidt and Jackson (2005), identify that in balancing communication and culture employee engagement and empowerment are built in. Goodman and Rousseau (2004) add that having a solid feedback system enables engagement among employees to be created, where knowledge sharing can be used as a mechanism to create this level of commitment among staff. Engagement and alignment is also identified by Guy and Beauman (2005) as the means of creating successful change management. Employee engagement is further reiterated by Vance (2006) as the link to commitment. He further adds that commitment requires a significant amount of investment to be made on the part of the individual. Therefore, committed employees

will expect that in exchange for their commitment they will receive something of value in return.

Commitment and engagement, trust, openness and participation are key variables , according to the findings of the research conducted by Chawla and Kelloway (2004). All these aspects relate to employee involvement, which is considered as a prerequisite for creating employee engagement and this will prove to be crucial when it comes to successfully implementing a change initiative within an organization.

As discussed earlier, competency development highlights that effective human resource practices reinforce competencies by creating higher levels of employee commitment. According to Vance (2006) there are several steps that organizations can take to create higher levels of employee commitment to ensure that staff are engaged and thus reinforce the ability for change. These are ‘job creation’ by developing such roles that provide variety, autonomy, support, empowerment and visibility. The next is ‘recruitment’ where during the advertising stage organizations need to advocate the interest they place in work commitment and engagement. Therefore they need to reinforce the attractive features of the position they advertise. This needs to be the same for both internal and external candidates as well. The third area is ‘employee selection’. For example, when selecting candidates organizations must select individuals that are best suited for the job roles in question in order to make sure that the employee feels engaged and committed to the performance of the organization. Selecting the right candidate that has the appropriate set of skills in the context of the job role to be recruited for, as well as the ability to fit into the culture and mentality of the organization minimizes employee resistance to change. The fourth and final aspect is ‘training and development’. This acts as an additional lever for creating, fostering and reinforcing employee engagement. As discussed earlier in the competency-development section, providing new recruits and existing employees the necessary skills via training and development become crucial to enabling them to perform accordingly.

Research identifies that change management and sustainable strategies may not always appeal to managers and decision makers in an organization in the same manner. Further studies highlight the fact that the concepts of sustainability are patchy and are not fully grasped even within committed organizations (Millar, et al., 2012).

Further, research studies identify that when change management strategies are implemented, the change agent has a considerable role to play but this element alone is not sufficient. The barriers to completely implement change strategies seem to be a result of personal cognitive frameworks that are rooted in value systems of individuals, therefore these value systems should be addressed as well if real change is to take place (Millar, et al., 2012).

From a business perspective, the most prominent notion of sustainable competitive advantage is the link with the resource-based theory, which argues that competitive advantage is gained by firms by way of internal resources and capabilities, which in turn, would be utilized to create superior performance. Most often the idea of sustainable competitive advantage is rooted within the private sector that has profit-oriented organizations and very little emphasis is placed on the public sector organizations (Matthews and Shulman, 2005).

According to the resource-based view businesses achieve sustainable competitive advantages through their capabilities such as values, rareness and inimitability (Barney, 1991; 1997; Barney and Hesterley, 1996). Private sector organizations use their capabilities to add value to their business model by using these capabilities in a proactive way and by demonstrating appropriate abilities or the ability to realize the benefits of a distinctive capability for the benefit of the firm itself rather than for its customers, suppliers, or competitors (Matthews and Shulman, 2005).

A research study by Kay (1995) on several public sector organizations suggests that though the resource-based view and triple bottom line approaches are central to the notion of competitive advantage in private firms, they only apply to public sector organizations where competition exists. This is mainly because public firms are funded by the government for public service and are frequently not in the need to compete with other organizations about offering a similar set of services to the public (Prajogo et al, 2012).

However, the resource based view is clear and states that limitations related to resources and capabilities, internal or external may be, are equally applicable to any type of an organization in the private or public sector – all organizations need to be taking into

consideration the notion of sustainability and sustainable competitive advantages (Priem et al, 2012).

3.11 CHANGE MANAGEMENT FOR SUSTAINABILITY UPTAKE

It is clear from the literature reviewed in this chapter that change management is an integral part of organisational life – simply because, business environments never stand still. To quote Darwin (1809-1882) in his book, *The Origin of Species* (1859), ‘it is not the strongest of the species that survive, nor the most intelligent, but rather the ones that are most adaptable’. Hence organisations must continuously be updating themselves and be changing in line with their environmental conditions. In fact the latter is also in the very centre of the definition of organisational capabilities in line with the concept of strategic fit (Prahalad and Hamel, 1990), where Strategic fit is said to be resulting from the effectiveness of organisational strategies in ensuring that resources, practices and capabilities developed correspond to the opportunities and challenges in the organisation’s external environment.

Irrespectively of the genuinely diverse view points and arguments in the literature about what is the best way of going about to achieve organisational change, the spirit of the notion is that organisational change management is a systematic approach to managing changes in order to adapt according to the challenges experienced in the business environment and hence become and/or maintain the sustainability of the organization.

In the process, organisational structure, resources, systems and processes must be reviewed in order to develop and/or increase an appropriate set of capabilities to enable the organisation to become more competitive. However, given that people work, drive and energise organisations, the ‘people’ element is the most crucial in change management. Therefore, cultural aspects that include leadership, communications, staff training and development, empowerment and motivation to mention but a few, are all key in successfully managing change in an organisation.

Another important lesson that is clear from the literature is that change management is not a one off event, or an ad hoc activity, but rather is a process that is difficult, on-going, time consuming and needs to be reviewed and evaluated at regular intervals in order to maintain organisational abilities.

3.12 SUMMARY

This chapter has presented a thorough review of the literature change management related to the current study's research objective 6. Empirical results are discussed in Chapter 5, 6, 7, and 8. The next chapter (i.e. Chapter 4) describes the research methodology adopted for this study.

CHAPTER 4 : METHODOLOGY AND DESIGN OF THE FIELD STUDY

4.1 INTRODUCTION

According to Best (1977), research is a systematic and objective analysis and recording of controlled observations that may lead to the development of generalizations, principles, theories and concepts, resulting in prediction for seeing and possibly ultimate control of events. Clarke and Clarke (2004) are in agreement and state that research is a careful, systematic and objective investigation conducted to obtain valid facts, draw conclusions and established principles regarding an identifiable problem in some field of knowledge.

On the other hand, the Industrial Research Institute (2010) explains that research methodology is a way of finding out the result of a given problem on a specific matter that is also referred to as research problem. In the process, different sources and methods are used for solving the problem. Hence, they continue, that the word 'Methodology' is the way for searching or solving a particular research problem.

However, Greener (2008) explains that research methods and research methodology are not the same and these two are terms that are often used interchangeably; research methods are the methods by which to conduct research into a subject, or a topic, and research methodology includes the methods by which to proceed in a research. Greener (2008) continues that research methods involve processes such as experiments, tests and surveys and research methodology involves the learning of the various techniques that can be used in the conduct of research and in the conduct of tests, experiments, surveys and critical studies. In short, she maintains that research methods aim at finding solutions to research problems and research methodology aims at the employment of the correct procedures to finding out possible solutions.

Saunders et al (2012) are in agreement with Greener (2008) and state that the term 'methods' refers to the diverse techniques and procedures used to collect and analyse data and it, therefore, includes questionnaires, observation and interviews as well as both quantitative and qualitative analysis. In contrast, they continue, the term

‘methodology’ refers to the theory of how research should be undertaken in order to arrive to an informed, credible and valid conclusion.

Hence in line with the above in this chapter the complete methodology that underpins this research is fully discussed. In doing so, both the field design and data collection processes in relation to this study are argued both philosophically and specifically whilst justifying their relevance for this type of an examination.

4.2 RESEARCH PHILOSOPHIES

The first step when designing a field research is to select the most appropriate research philosophy, in the context of the given examination, in order to theoretically underpin the investigation. This is of vital importance as this choice, in turn, affects the choices made further into the design of the research (Saunders *et al*, 2012).

Researchers vary in terms of their philosophical approach to research. Historically, two views or epistemologies, dominate the literature; positivism and phenomenology. Positivism assumes that the world is objective and holds ontologically that the world is a knowable entity, from which a set of laws can be built. According to Remenyi *et al* (1998, p. 32), researchers with a positivistic approach to research prefer ‘working with an observable social reality, and that the end product of such research can be law-like generalisations similar to those produced by the physical and natural scientists’. The researcher, in this case, assumes the role of an objective analyst making detached interpretations about those data that have been collected in an apparently value-free manner (Saunders *et al*, 2012). To that end, there is an emphasis on a highly structured methodology to facilitate replication (Wilson, 2010) and quantifiable observations that lend themselves to statistical analysis. Researchers with a positivistic approach to research commonly use quantitative data collection and analyses techniques (Saunders *et al*, 2012).

Phenomenology, on the other hand, views the world as being subjective and socially constructed by the individual and interpretable within individual cognitive frames. Phenomenology is based on the way people experience social phenomena in the world in which they live and seeks to find not only the ‘what’ and ‘how’, as in the positivistic approach, but also the ‘why’. According to Remenyi *et al* (1998, p. 35),

‘phenomenology aims to discover the details of the situation to understand the reality’. Thus, it seeks to understand what is happening and why is it happening. To that end, phenomenologists analyse the ordering of social reality and how the usage of certain forms of knowledge contribute to that ordering (Denzin and Lincoln, 1998; Wilson, 2010; Saunders et al, 2012; Bryman, 2012).

However, it would be a mistake to consider one technique ‘better’ than the other. As Saunders et al (2012) state, they are ‘better at doing different things, depending upon the research question(s). Positivism is associated with what is known as the deductive approach, where first a theory and hypotheses are developed and then a research strategy is designed to test these hypotheses. An important characteristic of the deductive approach is the search to explain causal relationships between variables. Phenomenology is associated with what is known as the inductive approach, where data collection takes place first and then theory is developed as a result of the data analysis. An important characteristic of the inductive approach is to get a feel of what is going on so as to understand and explain better the nature of the problem Bryman and Bell, 2011).

Consequently, several research philosophies could be applied when conducting research depending upon the type of research to be conducted and the data to be collected. The key philosophical standpoints of the diverse research philosophies are discussed here below:

Ontology: The root definition of Ontology Blaikie (1993) articulates is ‘the science, or study, of being’, and he adds that it includes statements such as ‘claims about what exists, what it looks like, what units make it up and how these units interact with each other’. In other words, (Bryman and Bell, 2011; Bryman, 2012) ontology describes the views of a researcher on the nature of reality and in particular whether the objective reality exists and is authentic (objectivism; how social entities exist independently of social factors), or whether it is one that has been perceived by the minds of people or by means of social constructionism (subjectivism; understanding the meanings that individuals attach to social phenomena).

As a result individuals hold a number of ontological assumptions which may be objective and/or subjective. These assumptions are then affecting the concluding

analysis of the research; hence, all assumptions should be recognized and incorporated in order to carry out a research successfully (Saunders et al, 2012).

Epistemology: As a result of the different views of reality in ontology, questions are raised on the subject of how reality is measured and what knowledge is composed in that reality. This particular matter has been addressed by the viewpoint of Epistemology (Wilson, 2010; Bryman, 2012; Saunders et al, 2012).

Epistemology is concerned with what constitutes acceptable knowledge in a particular field of study. Several authors have distinct definitions for Epistemology; Blaikie (1993) describes epistemology as the theory or science of the method, or grounds of knowledge. He elaborates this into a series of assumptions about how it is possible to gather knowledge of reality, ascertain what realities exists, how to determine its existence, and what decisive factors must be fulfilled in order to classify it as knowledge. Eriksson and Kovalainen, (2008) state that epistemology is what is knowledge and what are the sources and limits of that knowledge. Hatch and Cunliffe (2006) identify epistemology as knowing how you can know and involves aspects such as asking how knowledge is gathered, what distinguishes good knowledge from bad knowledge, and how should reality be described. They continue by emphasizing the interdependent relationship between epistemology and ontology.

Positivism: Positivism is based upon values of reason, truth and validity and there is a focus purely on facts gathered through direct observation and experience and measured empirically using quantitative methods such as surveys and statistical analysis (Blaikie, 1993; Eriksson and Kovalainen, 2008; Easterby-Smith et al 2008; Hatch and Cunliffe, 2006, Wilson, 2010; Bryman and Bell, 2011; Saunders et al, 2012). When the research conducted is based on objective reality, observed information and statistical data, for the development of knowledge, researchers can be said to be using a positivist philosophy.

Positivism arises when adopting the philosophical stance of the natural scientist. Remenyi et al (1998:32) describe this as ‘working with an observable social reality and that the end product of such research can be law like generalizations similar to those produced by the physical and natural scientists’. Data that are accurate and factual can only be considered under this philosophy. As a result the research strategy will use a recognized theory to develop the hypothesis for the data gathered.

Interpretivism: This philosophy is also known as constructivism. Blaikie (1993) describe this as post-positivist approach and Hatch and Cunliffe (2006) as an anti-positivist since it is understood that there is a fundamental difference between the subject matters of natural and social sciences. This particular research philosophy advocates that it is necessary for the researcher to be aware of the differences between different persons. Consequently, it highlights the importance of conducting research among people rather than objects. The data gathered would encompass experience and recollections of memories of individuals among whom the survey would be conducted, thus data is constructed continually and gathers several interpretations over time (Wilson, 2010; Bryman, 2012; Saunders et al, 2012). Therefore, it is vital that the researcher identifies the underlining factors and establish suitable interpretations to the different data recorded.

Interpetivism is based on two main principles; phenomenology and symbolic interactionism. Phenomenology is the ways in which individual persons make sense of the surrounding world. Symbolic interactionism, on the other hand, is the practice of interpreting the actions of individuals in the social world (Liamputtong and Ezzy (2005).

Realism: For the reason that positivism is overly realistic due to its unalterable nature and constructivist philosophy is entirely subjective, realism draws aspects from both of these philosophies. Realism holds that realistic structure exists regardless of human perception, but that knowledge is socially constructed, as highlighted by Saunders et al (2012) that our knowledge of reality is the result of social construction. Blaikie (1993) adds that whilst realism is concerned with what kinds of realities exist, it is accepted that reality may exist despite of science or observation, and so there is validity in recognizing that realities exist, be it proven or not.

Researchers that employ realism take the view that it is imperative to conduct research from several angles and at multiple levels which will all contribute to understanding, since reality exists at multiple levels (Liamputtong and Ezzy, 2005; Wilson, 2010; Bryman and Bell, 2011; Bryman, 2012; Saunders et al, 2012). Hence realism can be described as inductive, or theory building (Chia, 2002).

Pragmatism: Pragmatism identifies that the most important determinant when selecting a research philosophy is the research question. Consequently, one philosophy may be more suitable than the other for each individual research question in the process of research (Bryman and Bell, 2011; Bryman, 2012).

Thus the pragmatic approach to science involves using the method which appears best suited to the research problem and not getting caught up in philosophical debates about which is the best approach (Bryman and Bell, 2011; Bryman, 2012; Saunders et al, 2012).. Pragmatic researchers, therefore, grant themselves the freedom to use any of the methods, techniques and procedures typically associated with quantitative or qualitative research. They recognize that every method has its limitations and that the different approaches can be complementary (Saunders, 2012).

Axiology: Axiology is the philosophical study of value and value judgments. The values of the researcher are an important factor when conducting research. Saunders et al (2012) cite Heron (1996), who argues that individuals' values are the guiding driver for their actions. Further, articulating their values as a basis for making judgments about the research topic and research approach are a demonstration of an axiological skill.

The combined approach of this perspective includes phenomenology which would be adopted for the respondents using qualitative face-to-face interviews via a semi-structured questionnaire and semi-open questions and positivism.

4.3 RESEARCH APPROACH

The research philosophy selected in a research study, in turn, determines the entire structure of the research process. To that end, there are two types of research approaches used, in line with the diverse schools of thought in the various philosophies (Saunders et al, 2012). These are:

- Inductive
- Deductive

Both of these approaches are individually associated to each of the main research philosophies that a researcher selects. The deductive approach is usually associated with positivism and the inductive approach is associated with phenomenology (Bryman and Bell, 2011). However, Saunders et al (2012) complain about the tendency of linking

these research approaches to the research philosophies. They state that it mostly depends on the nature and scope of the research study and that the researcher should select the most appropriate research approach that suits the data to be collected.

In the opinion of Wilson (2010) the deductive approach can be explained as developing hypotheses which is derived from some existing theory, and then formulating research strategy for hypotheses testing. According to this approach, a set of hypotheses are developed and are then tested through data collection and analysis with the view of accepting or rejecting the given hypotheses. Hence the deductive approach is about deducting the conclusions from judgment coming out of the specific theory being hypothesized. Pelissier (2008) refers to this method as the water fall approach. In his view the deductive approach starts from broad observations and then move towards some specific interpretation.

The inductive approach is the opposite of the deductive approach. The research starts with detailed observation of the researcher and move towards more generalized interpretations. Here the researcher develops an idea through observations and then collects data in order to create a new idea or theory as a result of analysis of the data collected (Bryman and Bell, 2011; Bryman, 2012).

According to Lodico et al (2010) the inductive approach is also called bottom up, or hill climbing approach, as the researcher starts a research simply from an observation and then gradually moves towards explaining that idea - which, eventually ends at some existing or new theory. Moreover, in the opinion of Bernard (2011) the inductive approach doesn't bound the researcher to a specific theory from the start of the research and thus the researcher can freely develop different patterns of ideas in the process as well as changing the direction of the study is relevant according to the observations made. In this research inductive approach is adopted.

4.4 RESEARCH DESIGN

Research design can be considered as the detailed highlights of the research process that a researcher follows. In the opinion of Parahoo (1997) research design explains that how, when, and where the data will be collected and analyzed. While Polit et al (2001) refer to the research design as the researcher's general idea about how the research

question(s) will be answered or the methods for testing the hypotheses. The research design can be categorized in different types; Exploratory Research, Explanatory Research, Descriptive Research (Saunders et al, 2012).

Exploratory Research: This type of research design is mostly suitable when information available about the research subject is too little (Wilson, 2010; Bryman and Bell, 2011). Hence the researcher explores different ideas that are relevant with the subject matter under investigation in order to identify the factors and elements associated with it, and to begin with, data is collected through secondary sources. Primary data is collected via qualitative research methods at large (Saunders et al, 2012).

Exploration is mostly relevant when the researcher is not aware with the problem, or the reason behind the problem, and thus explores the issue through various sources. Exploratory research has three main objectives; to obtain a deeper understanding of the subject under examination, to determine the possibility of conducting in-depth further analysis, and to develop the techniques to be utilized in further successive studies (Bryman and Bell, 2011; Saunders et al, 2012).

Explanatory Research: As the name describes, this research design is about explaining the problem, or issue at hand. In the view of Dane (2010) explanatory research is conducted to explain the issue of why. It not only explains the problems but also the variables and relationship(s) of the variables involved in the mechanism. According to White (1999) the explanatory research design attempts to build theories and forecast natural and social phenomena. He further says that the ultimate goal of this research design is to gain control over natural and social events.

Some general objectives of the explanatory research method include answering the research question of 'why', identifying two or more variables and understanding the relationship between these variables, interpreting the causes and effects between these variables and identifying the difference between the responses of two different groups of respondents (Wilson, 2010; Bryman and Bell, 2011; Bryman, 2012; Saunders et al, 2012).

Descriptive Research Design: In the opinion of Burns and Grove (2003), descriptive research structures describe a situation just as it has happened. This type of research design does not result in the development of new theories but rather it describes the already existing data in a systematic way. Although some authors (Sandelowski, 2000; de Vaus 2001) call descriptive research ‘a mere description’ it sometimes delivers significant information, facts and figures that provide better basis for explanatory research. For example, a population census not only provides information about the number of people but also about various social indicators like demographics, unemployment, and literacy.

According to Rubin and Babbie (2008) descriptive research aims at describing different attributes of a sample and the relationship(s) between different situations and events. In the opinion of Yegidis and Weinbach (2002) there is no involvement of hypothesis in descriptive research but in exceptional situations, some hypotheses are developed but these are meant only for describing the correlations between variables.

In addition Thomlison (2001) articulates that a descriptive research design does not study the impact of a theory nor it tells details of a relationship between variables, however, it is significantly used on state survey levels and yields valuable information.

In order to address the requirements of this study, the exploratory methods of research design has been selected. The approaches adopted are in line with the choice made earlier to adopt the pragmatist research philosophy.

4.5 TIME HORIZON OF RESEARCH

The time horizon allocated to a research essentially means the approximate time which the researcher takes in order to collect the data required for the research. Typically, this is categorized into two types, namely; cross sectional research and longitudinal research (Saunders et al, 2012; Bryman and Bell, 2011).

Cross sectional research: The cross sectional research is also known as the ‘snapshot’ approach. This is where research is conducted for a given phenomenon at a particular point in time taking into consideration differing perspectives of diverse variables and

individuals (Wilson, 2011; Bryman and Bell, 2011; Saunders et al, 2012; Bryman, 2012). This type of research is particularly feasible when the given project is constrained by time. Therefore, a very important feature in this type of research is having the ability to compare different variables at a single point in time. However, the latter is also the main disadvantage of this kind of research – simply because changes that have happen earlier and after the research conducted would not be taken into consideration. Taking into consideration the time limitations imposed in most research activities most researchers utilize this type of research in order to carry out their study.

Longitudinal research: When conducting a longitudinal study, the researcher conducts research over a longer period of time unlike that of a cross sectional research. The time taken to carry out such research varies on the researcher's requirements, and in certain occasions, may even spans into several years (Saunders et al, 2012).

The key advantage of conducting a study of this nature is, since the study is conducted over an extended period of time and beyond a single point in time, the research has the ability to identify changes in the variables that are being observed and therefore enabling the researcher to explain in detail the cause and effect relationships between variables. Strategies such as an experiment, action research, and grounded theory are typically used in this type of strategy.

Approach adopted for the research: In this study the cross sectional approach has been adopted because of both the time constraints involved in an academic study as well as the time constraints imposed by the organization at hand in order to minimize disruptions in operations. Consequently, the timing of the data collection process is anticipated to be about three to four months. Of course, more time will be allocated accordingly, if problems are experienced during the process of collecting the data. In addition, because this entire research study is based on one specific organization the research strategy employed is that of the case study.

4.6 SAMPLING

Sampling is the process in which a pre-determined number of observations are selected from a larger population. Sampling is of critical importance in research, as in most cases

there is a larger population that due to numerous restrictions sampling is the only viable option in obtaining reliable responses that represent the views of the wider population. Sampling methods include two main categories (probability and non-probability-based samples) and in each category there are a number of techniques in order to select the most suitable sample in the context of the given research (Wilson, 2011; Bryman and Bell, 2011; Saunders et al, 2012; Bryman, 2012).

Probability-based sampling

- **Simple Random Sampling:** This is the simplest form of probability sampling techniques where the probability of selection is equal for every case in the population. There is no prior organizing of the population but samples are just drawn in a simple random manner. This method diminishes the unfairness and simplifies the examination of the consequences; therefore, the variance of the overall population can be constructed by identifying the variance between individual outcomes within the sample. However, this method is at risk to errors since the arbitrariness of the choice may consequence in a sample that does not replicate the composition of the total population. It can also be burdensome in the case of a large target group.
- **Stratified Random Sampling:** In this type of sampling the entire population is divided into two or more mutually exclusive segments based on some categories of variables of interest pertaining to the research and involves sampling each of these subsets in a random manner. A main advantage of this kind of sampling is that the ultimate sample selected is representative of the entire population.
- **Systematic Sampling:** This sampling method is a variation of the simple random sampling method and involves some listing of elements. Compared to random sampling this method of sampling is relatively easy to draw and easier to carry out with less mistakes. This is an easy method to implement and the stratification makes the process more efficient. However, it is prone to errors in terms of periodicities in the list. In this method, the group of population is classified and the frame is structured into distinct 'strata'. Each stratum is then sampled as an autonomous sub-population, out of which individual elements can be randomly picked. The definition of strata enables recognition of inferences about specific subgroups which may not be visible in a generalized random

sample. Making use of a stratified method also leads to more well-organized statistical approximations. With independent strata it is probable to apply different sampling methods for each subgroup yielding in more consistent analysis. However the comprehensive implementation of the stratified sampling may result in increased costs.

- **Cluster Sampling:** This method of sampling is used when samples are selected from populations which are dispersed geographically. Under this method of sampling the population will be broken down into different groups, known as clusters, and each cluster has some identifying characteristic. Cluster sampling generally increases the variability of sample estimates above that of simple random sampling, depending on how the clusters differ between themselves, as compared with the within-cluster variation. Thus cluster sampling requires a larger sample than stratified random sampling to achieve the same level of accuracy.

Non probability-based sampling

- **Availability Sampling:** This is a method of sampling where subjects are chosen according to their availability, this method is relatively easy but rather a haphazard as running the risk of having a sample that does not represent the population.
- **Quota Sampling:** This type of sampling is based on quotas that are set to ensure that the sample chosen represents certain characteristics in proportion to their prevalence in the population. However, in order to utilize this method of sampling it is essential to have an idea about the characteristics of the chosen population ahead of time. This involves categorizing the target population in a similar way to stratified sampling and then by means of judgment to select the subjects from each segment based on a specified proportion.
- **Purposive Sampling:** This method of sampling is where candidates for the sample are chosen based on the purpose of the study. This sampling technique may involve studying the entire population of some limited group such as an organization or a subset of a population group.

- **Snowball Sampling:** This method of sampling involves the identification of one member from the population of interest in order to collect data from; then ask the respondent to recognize other people with similar interest/ideas whom the researcher can speak to. Hence snowball sampling is based on referrals from respondent to respondent and it is mostly suitable when members of a targeted population are difficult to identify.

Approach chosen for this research

In this investigation data was collected from 60 respondents who are in the senior and management of the organization and at the operational level as illustrated in Figure 4.1. The senior management group consists of the upper echelon of the Abu Dhabi Police structure as illustrated in figure 4.1, with the exception of the Commander General. Specifically it includes all heads of the highlighted areas, including the deputies of the various directorates in order to ensure that the opinions of all top level individuals are taken into consideration. Purposive sampling has been employed for this particular group in an effort to ensure that all relevant individuals are interviewed. Data was collected using qualitative face-to-face semi-structured interviews with open and semi-opened questions.

The second group consists of everyone else below the top management level irrespectively of their particular rank in the structure of the organisation. However, Abu Dhabi Police employs about 12,500 officers overall. Hence a simple random methodology has been employed.

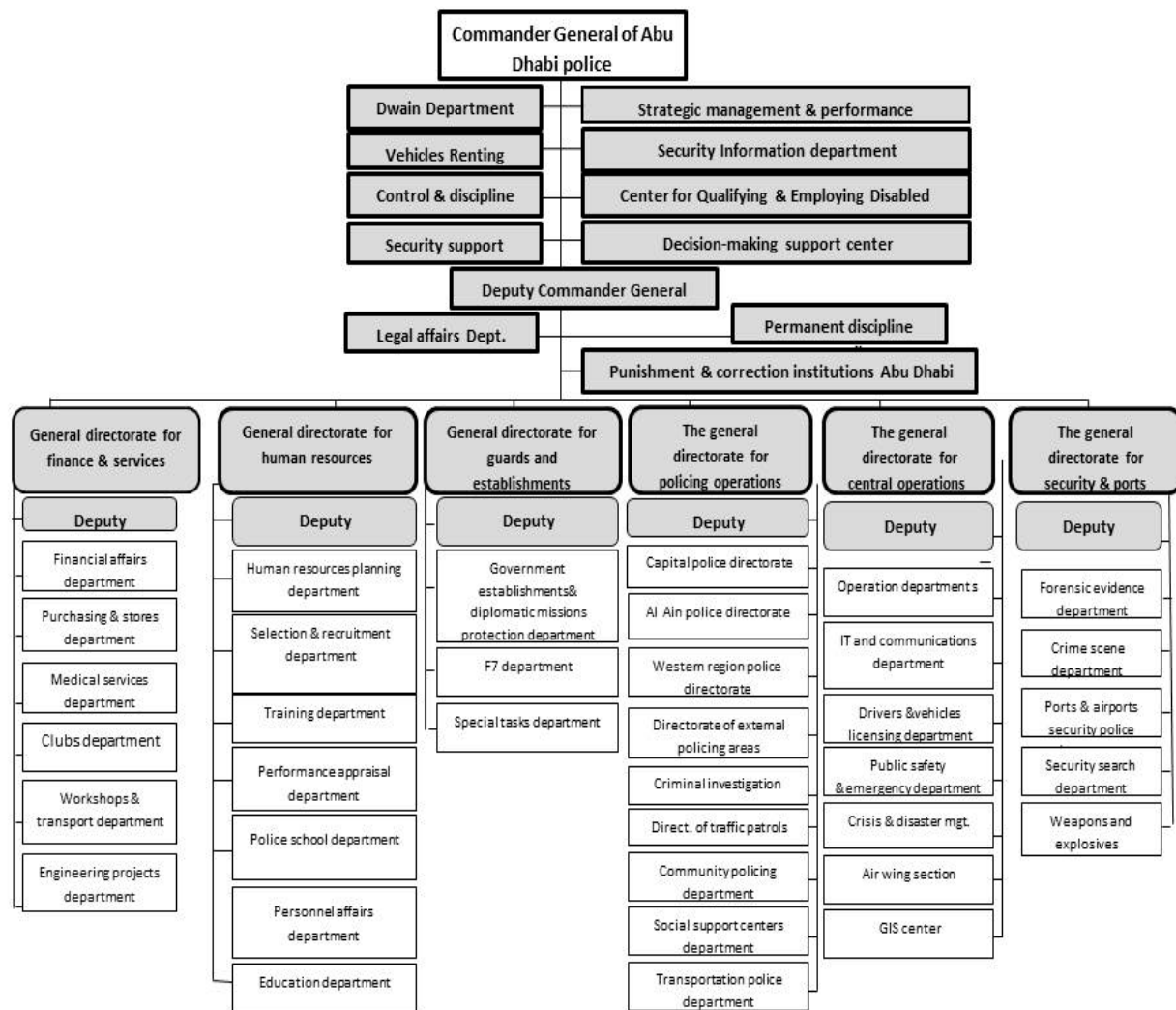


Figure 4.1 Abu Dhabi Police Force Sampling Frame

4.7 PILOT AND MAIN STUDY

A pilot study can be described as a smaller version of a larger study that is constructed in order to prepare for the actual study (van Teijlingen and Edwin, 2001). Edwin and Vanora (2001) state that a pilot study is the foundation for a good study; it avoids time and money being unnecessarily wasted on an ineffectually constructed research design. According to (van Teijlingen and Edwin, 2001) and in agreement with Edwin and Vanora (2001) a pilot study is frequently used to analyze the research design of the full-scale investigation which can then be attuned to ensure that the relevant data will be collected.

In this study before the commencement of the full scale field research, interview-based questions were tested for effectiveness. A small number of individuals were shown the questions they were asked to make comments to the particular questions and if they understand the line of questioning. Feedback will then be incorporated in order to ensure that questions are articulated and presented effectively.

The main interview with individual lasted at an average for about an hour each. Interviews were recorded in order to enable the development of transcripts at a later time. The interview-based questions were written in both English and Arabic. The English version will be used to illustrate the questions in this thesis and the Arabic will be used in the field research because not necessarily individual respondents have the knowledge to read and speak in English and/or have a sufficient command of the language. Hence the interviews were conducted in Arabic in order to ensure clear understanding and articulation. Transcripts were then translated into English by the researcher in order to enable the analysis and discussion of findings in this thesis.

A total of 60 interviews were conducted. The participants for the interview are 20 interviews at the director level, 20 interviews at the manager level and 20 at the operational level.

4.8 DATA ANALYSIS

With regard to the type of analysis adopted in this study, it follows that of a qualitative technique. Miles and Huberman (1994) state that qualitative research focuses on 'naturally occurring, ordinary events in natural settings, so researchers can have a strong handle on what real life is like' (p. 67). They also argue that another feature of qualitative data is their richness and holism with a strong potential for revealing thick descriptions that are vivid, nested in a real context, and have a ring of truth that has a strong impact on the reader (Miles and Huberman, 1994) and Wilson (2010) and Saunders et al (2012) are also in agreement.

Qualitative research can be seen as representing two paradigms, each historically assuming different ontologies and epistemologies (Bryman and Bell, 2011; Bryman, 2012). A paradigm, in this sense, refers to our working assumptions of the world and

how we know and respond to it (Golafshani, 2003). Qualitative data collected was subjected to content analysis using computer aided qualitative data analysis software (CAQDAS) and specifically using with latest version of NVivo.

4.9 RELIABILITY, VALIDITY AND GENERALIZABILITY

Reliability and Validity are issues that have been discussed at great length in the field (Saunders et al, 2012). Specifically, reliability is about the replicability of the process of research adopted and the accuracy of the procedures and research techniques. Validity, on the other hand, is how successfully the research has actually achieved what was set out to achieve (Golafshani, 2003; Bryman and Bell, 2011).

Joppe (2000) articulates that reliability is the extent to which results are consistent over time and the accurate representation of the total population under study is referred to as reliability and if the results of a study can be reproduced under a similar methodology, then the research instrument is considered to be reliable. In addition, he continues that validity determines whether the research truly measures that which it was intended to measure or how truthful the research results are.

However, the notions of reliability and validity, Golafshani (2003) and Bashir et al (2009) argue that are mostly associated with sole quantitative research paradigms and are not as straight forward in qualitative research paradigms. Winter (2000) and in agreement with Golafshani (2003) and Bashir et al (2009), state that quantitative researchers attempt to disassociate themselves as much as possible from the research process whereas qualitative researchers embrace their involvement in their research – and, Patton (2001) and Bryman (2012) also support this notion.

Nonetheless, and irrespectively of the intricacies of either reliability or validity, it is clearly expected that both qualitative and quantitative researchers demonstrate that their studies are credible (Patton, 2011; Wilson, 2010; Bryman, 2012; Saunders et al, 2012).

However Patton (2001) argues that while the credibility in quantitative research depends on instrument construction, in qualitative research the researcher is the instrument. Hence, he continues, it seems when quantitative researchers speak of research validity and reliability, they are usually referring to a research that is credible

while the credibility of a qualitative research depends on the ability and effort of the researcher and Golafshani (2003) is also in agreement.

Nevertheless, it is hoped that through the methodological techniques selected in this field design the notions of reliability, validity and consequent generalizability are demonstrated sufficiently in the context of this research study.

4.10 THE DEVELOPMENT AND VALIDATION OF A STRATEGIC FRAMEWORK FOR IMPLEMENTING CHANGE ASSOCIATED WITH SUSTAINABILITY INITIATIVES

The empirical findings from the previous stages of the research study and aspects from critical review of literature were taken into consideration in the development of the framework. In this study, during face-to-face interviews, interviewees were asked the need for a strategic framework for implementing change associated with sustainability initiatives. 90% of the interviewees cited the need for a comprehensive framework for the integration of sustainability issues. Therefore, a framework was developed (see chapter 6 for more details). The developed framework uses environmental, social and economic dimensions of sustainability as its foundation.

The developed framework was validated with 12 professionals. The professionals had over 20 years of work experience in the sustainability and change management. The professionals had been informed by e-mail about the objectives of the research study and aim of the framework. Also attached to the email was the developed framework. This e-mail was sent one week prior to the face-to-face interview so as to create an opportunity for the interviewees to review the developed framework. The experts selected were required to provide comments on the developed framework. The semi-structured interviews were held between September 2015 and October 2015. The interviews lasted between ten and fifteen minutes. The format of these interviews was face-to-face. All face-to-face interviews were recorded with permission and later transcribed. As part of the analysis of the interviews, content analysis was employed.

4.11 SUMMARY

This chapter has discussed the complete methodology and the data collection processes of this research study. The chapter also explains why and how qualitative methodology

was adopted for this research study. It involved qualitative approach of data collection and analysis. Content analysis was used to analyse qualitative data results from the analysis of qualitative are discussed in Chapter 5, 6, 7 and 8.

CHAPTER 5 : THE PERCEPTION AND DRIVERS FOR IMPLEMENTING SUSTAINABILITY INITIATIVES

5.1 INTRODUCTION

This Chapter 5 discusses the perceptions of Abu Dhabi public sector organisation on the concept of sustainability. Furthermore, this Chapter focuses on the key drivers that have fuelled the need for implementing sustainability initiatives in the Abu Dhabi public sector organisation. The results are based on the perceptions of the 60 interviewees who participated in this study. The findings are also substantiated with the relevant literature.

In the current study, during face-to-face interviews (see Appendix A), in order to capture the general perceptions of the Abu Dhabi public sector organisation on the concept of sustainability, a question was raised, i.e. what does sustainability mean to your organisation? The current study results revealed that, the perceptions of the Abu Dhabi public sector organisation on the concept of sustainability falls broadly into three key categories (see Table 5.1). They are environmental, economic, and social sustainability. Each of these key dimensions is discussed in details from section 5.2.1 to 5.2.3. Finally, section 5.4 summarises the key findings. In doing so, section 5.2 addresses the first research objective of this current study, which is “to investigate and document the perceptions of the Abu Dhabi public sector organisation on the concept of sustainability” and first research question, which is “what does sustainability mean to the Abu Dhabi public sector organisation”.

Furthermore, during face-to-face interviews, in order to capture the key drivers that have fuelled the need for implementing sustainability initiatives in the Abu Dhabi public sector organisation, a question was raised, i.e. what drivers have fuelled the need for implementing sustainability initiatives in your organisation? Five key drivers were revealed. Each of these key drivers is discussed in detail from sub-section 5.3.1 to 5.2.5. Finally, section 5.4 summarises the key findings. In doing so, section 5.3 addresses the second research question of the current study, “what are the key drivers that have fuelled the need for implementing sustainability initiatives in the Abu Dhabi public sector organisation”. Overall, section 5.3 addresses the second research objective which is “To explore and document the key drivers for implementing sustainability initiatives”.

5.2 PERCEPTION OF THE ABU DHABI PUBLIC SECTOR ORGANISATION ON THE CONCEPT OF SUSTAINABILITY

It is evident from the Table 5.1 that the perception of the Abu Dhabi public sector organisation on the concept of sustainability is more aligned towards the environmental dimension. This is closely followed by social and economic dimension. Each of the three key dimensions of sustainability is discussed in detail from section 5.2.1 to 5.2.3.

Table 5.1: The perceptions of the Abu Dhabi public sector organisation on the concept of sustainability (N=60)

Sl. No	Sustainability dimension	Total number of interviewees cited (N=60)
1	Environmental dimension	36 (60%)
2	Social dimension	20 (33%)
3	Economic dimension	4 (7%)

5.3.1 ENVIRONMENT DIMENSION

It is interesting to note, that in recent times there has been an increase in the awareness and meaning to pursue sustainability. Despite this, the commitments are by few, rather than a mass of individuals. This demonstrates that the underpinning of sustainability is not understood by a vast majority of individuals (Onwueme and Borsari, 2007).

In this study, overwhelmingly 60% (36 of the 60) of the interviewees stated the concept of sustainability from an environmental dimension. Results suggest that interviewee's perception on the concept of sustainability is very narrow and distinct. However, the term sustainability is more than environmental issues and it gives equal importance to social and economic aspects as well.

When asked regarding their perceptions of sustainability interviewees responded with comments on energy consumption, emissions, wastage and resources management indicating the environmental aspects of these issues. This is expected as Renukappa, et al. (2012) states the high emphasis of attention given towards the environmental aspect of sustainability. This is also evident as the environmental aspects were highlighted as second highest amongst principles within sustainable development definitions (Gagnon et al., 2009). For instance, one of the interviewees stated that:

“For us, sustainability means reducing our organisation negative impact on the environment. Therefore, for me, to fully utilise natural resources, efficient use of energy, and less waste generation in my work is a way that will ensure a healthy environment that human can exist in”.

The aforementioned view of the interviewee highlighted the concept of sustainability in relation to the environment and energy usage, indicating this is the supposed perception of sustainable development and it should be expected to be said. As mentioned it is easy to understand why environmental issues are emphasized highly as Zabihi, et al., (2012) noted initial basis for sustainability was based on energy usage and reducing damage to the environment. The environmental aspect of sustainability is highlighted by concerns over issues such as climate change where attention towards energy usage is raised. This is due to extensive pressure from the government and environmentalist causes which has caused a greater awareness towards environmental issues.

Sustainability has grown to include other aspects involved in its makeup as noted by Zabihi, et al., (2012) and the data obtained, where it has grown to include issues such as cost reduction, materials and societal advancement. However environmental concerns remain synonymous with sustainability evident in this study. The high emphasis towards the environmental aspect of sustainability could be the result of attempting to undo the bad reputation highlighted by Barthorpe (2010).

5.3.2 SOCIAL DIMENSION

The development of the social perspective on sustainability has tended to trail behind that of environmental perspectives and remains a relatively new development (Sharma and Ruud, 2003; Dillard et al., 2008). The social bottom line incorporates issues of public health, community issues, skills and education, social justice, workplace safety, working conditions, human rights, equal opportunity and labour rights to name a few.

In this study, 33% (20 of the 60) of the interviewees echoed the concept of sustainability from a social sustainability dimension. The original statement from the Brundtland commission (1987) signified the importance of preserving future societies drawing attention towards social aspects. Also the fact that Gagnon et al. (2009)

identified social aspects to be the most common principles pertaining towards definitions of sustainability provides a contrast to its implementation within the public sector organisation. Social sustainability is to look at the how the project will benefit society, the impact it will have on local community and overall taking a holistic view in determining the wide ranging effects caused. The following extract from an interview demonstrates taking the social aspect of sustainability into consideration:

“Then there is access and linkages how we could get people there easily. Then there is creating safe communities and local character heritage, how does this programme fit into the surrounding area.”

This demonstrates clear thought being given towards how elements of the projects will have a long lasting effect upon the surrounding community, considering communication routes and surrounding area. This identifies with Porter and Kramer (2006) where there is shared value between the community and the organisation which is looking to be utilised for competitive advantage. The lack of emphasis towards the social dimension matches the literature where Porter (1989) states that businesses are not equipped to deal with social problems but rather this is the responsibility of government bodies and NGO's.

5.3.3 ECONOMIC DIMENSION

In this study, only 7% (4 of the 60) of the interviewees echoed the concept of sustainability from an economic sustainability dimension. Considering sustainability is commonly associated with actions such as resource efficiency, energy efficiency and cost reduction it is clear the economic benefit is placed alongside longevity in order to reap these benefits. However, in this study the economic aspect received minimal emphasis. The lack of emphasis towards economic aspects could be due to their nature of business. For instance, one of the interviewees noted that:

“We are building a General Head Quarters (GHQ). From a GHQ design point of view with sustainability in mind we're looking at designing with a view of creating a product that has longevity and minimises impact both in construction and in use. I don't think it's about energy, you've got to create buildings people want to keep.”

This highlights the economic view point of ensuring there is a saving on demolition, refurbishments and maintenance allowing for greater saving of finance. This perspective of sustainability is taken further where finance is the determining factor whether a project is sustainable. This quotation provides detail into the interviewee's perception of sustainability, indicating the need to act on ideas that can only be sustained through demand and therefore finance. This correlates with an argument provided by Aras and Crowther (2009) stating that sustainability can only exist if equity in the distribution of effects also exists.

Overall section 5.2 has addressed the first research objective of the current study, which is "to investigate and document the perceptions of Abu Dhabi public sector organisation on the concept of sustainability". Therefore, answered the first research question which is "what does sustainability mean to Abu Dhabi public sector organisation".

5.3 THE KEY DRIVERS FOR IMPLEMENTING SUSTAINABILITY INITIATIVES

Table 5.2 shows the key drivers that have fuelled the need for implementing sustainability initiatives as revealed by those interviewed in this study. It is evident that the most important key driver that fuelled the need for implementing sustainability initiatives is to enhance reputation. This is closely followed by reducing operating costs, leadership commitment, stakeholders' pressure, and Government legislation. In the following sub-sections (5.3.1 to 5.3.5), each of these key drivers is discussed in detail.

Table 5.2: The key drivers that have fuelled the need for implementing sustainability initiatives (N=60)

Sl. No	Key driver that have fuelled the need for implementing sustainability initiatives	Total number of interviewees cited (N=60)
1	Reputation building	56 (93%)
2	Reducing operating costs	54 (90%)
3	Leadership commitment	48 (80%)
4	Stakeholders' requirement	45 (75%)
5	Government legislation	40 (67%)

5.3.1 REPUTATION BUILDING

In this study, 93% (56 of 60) of interviewees noted that reputation enhancement is a key driver for implementing sustainable practices in their organisation. As authors such as Roarty (1997) and Rodriguez Melo and Mansouri (2011) have indicated society is becoming increasingly aware of environmental and social issues hence it would be advantageous to utilise sustainable initiatives in order to improve the organisation's reputation. This is made even more prevalent when reputation, brand and knowledge are considered the principle assets of a company (Kay, 2004). For instance, one of the interviewees noted that:

“We have implemented various sustainability initiatives in our organisation. The very purpose of these initiatives is to enhance our reputation compared to other police forces across the world”.

Analysis of the above statement reflects that reputation is crucial towards focusing on a developing the reputation by focusing on environmental, social and economic responsibility issues. As Fombrun and Van Reil (2003) point out reputation contributes to organisational stability, performance and employee loyalty, and to ease recruitment and decrease transaction costs, all of which are particularly attractive to police service organisations as they are struggling with financial and political pressures. In addition, according to Luoma-aho (2007) reputation has only recently been understood by organisations and still remains a much under used resource. Namely, strong reputation results from consistent information signals overtime, which constituents believe, share and trust.

Furthermore, excellent reputations require constant cultivation. Public funds are often scarce and the cultivation of reputation is rarely at the top of agenda. Indeed, the target level of reputation needs to be realistic. In other words, reputation has to be high enough for police service organisations to be trusted and taken seriously, but neutral or even low enough to acquire the necessary operating distance necessary especially in times of crisis. Reputation refers to the general image of police service organisations amongst the stakeholders enabling collaboration, leading to trust and other benefits. Yet, reputation should not be seen as an assessment of performance against expectations.

5.3.2 REDUCING OPERATING COSTS

Cost reduction is a key driver for implementing sustainable initiatives as in the UK, police forces are facing budget cuts and predicted increase in energy prices (Cambridgeshire Constabulary, 2011). In the study, overwhelmingly 90% (54 of 60) interviewees asserted that this is a very important driver for implementing sustainability initiatives and was the most important driver out of all those identified. According to Dejong et al (2009) increased energy and water cost and growing awareness about climate change have pushed “sustainability issues” into organisational boardrooms. Most organisations can make significant energy saving by making changes that cost little or nothing to implement. For instance, the UK carbon trust estimates that most organisations in the service sector can cut their energy bill by 20% to 30% while those in industry can make saving from 5 to 10%. Therefore, encouraging employee to change behaviour can lead to big savings.

The study results revealed that 75% (45 of 60) interviewees noted that their organisation is having more energy and water consumption. Therefore, their organisation wants to adopt the “sustainable” policies in order to reduce energy and water consumption. For instance one of the interviewees noted that: a key driver for their organisation is

“Majority of the time it is a cost based decision if they are not going to see any benefit from using sustainable measures then it is unlikely they will go ahead”

The view of the interviewee clearly suggests that organisations are implementing various cost saving initiatives. This is indicated by Bansal (2005) where it is stated that sustainable initiatives are adopted in order to reduce costs. Cost reduction is obtained through a number of methods as detailed by the interviewees where cost was looking to be saved from materials, energy usage and waste management. Various sustainability initiatives such as eco-efficiency form basic components of sustainability (Savitz and Weber, 2006) where efficiency of resources and services are obtained through the decrease of the organisation’s operating costs. The emphasis of resource management also matches alongside Zabihi, et al (2012) stating resource efficiency and energy efficiency among the key principles of sustainable practices. However, 10% (5 of 60) interviewees do not think that there is a business case for sustainability initiatives. These interviewees argued that the cost for implementing sustainability initiatives is

more than return. However, Renukappa *et al.*, (2013) noted that the continuing rise in price of fossil fuels and the need to reduce carbon emissions will indefinitely face organisations with threats, leading to the need to implementing sustainability initiatives.

In summary organisations that see sustainability as opportunities to place themselves into a situation where it can reap benefits in the terms of cost saving will no doubt increase their competitiveness (Renukappa *et al.*, 2014). If organisations visualise to be cost leaders they will aim to be the low-cost producer. Hence, if an organisation can become and sustain cost leadership, then that organisation will reach higher performance in the industry and would reap the benefits of competitive advantage over others. In spite of this, it is important to note that organisations aiming to be cost leaders cannot ignore differentiation and needs to achieve proximity in all bases relative to competitors to be able to performance higher than the average rate (Porter, 1985).

5.3.3 LEADERSHIP COMMITMENT

Leadership commitment is indefinitely a key driver in addressing sustainability concerns as it involves the need for participation by high level members of police service organisations for example Commissioners or Chief Constables. In order, to oversee the implementation of practices to ensure they are in line with organisational goals and revising practices or policies if needed (Renukappa *et al.*, 2014). Hence commitment is essential in order for all police organisations to function efficiently.

In the study, 80% (48 of 60) interviewees noted that leadership commitment was a considerable driver for implementing sustainability initiatives in their organisation. This driver is related towards socially proactive organisations where management support is given towards environmental and social issues. Statements related to this driver are seen as management commitments being adhered to by members of the organisation.

Leadership commitment is crucial towards addressing sustainable issues due to top management having the ability in persuading organisations (Doppelt, 2009). The commitments undertaken are seen as the responsible course of action to by managers given their roles. Some of these commitments may not emphasise any overt perspective to allow for sustainability initiatives to be utilised providing an advantage but rather due to a responsibility felt by managers. This is illustrated by a quote obtained from an estate manager:

“I have that sort of personal ambition but being in estates, frequently organisation initiatives and that’s recycling, bins and all that. We are driven by our peers within estate management who say we need to do that, we need to do this. Furthermore, senior management’s inclination towards addressing social issues has also motivated to address sustainability issues and ensure that there is a job creation in the market.”

The above quote demonstrates a sense of personal responsibility from the interviewee along with an overriding responsibility among his peers encouraging sustainable initiatives to take place. What this allows is a greater alignment with the organisation’s business environment in order to maintain a dynamic balance as detailed by Porter (1991).

Managerial commitments are expected to not just altruistic but also the outcomes of these commitments could serve to help the company achieve goals as shown in the following quote from an interview:

“Also attracting the right staff to the business, people want to work for a sustainable business that shows this in different ways.”

Some employee’s prefer to work in a sustainability conscious organisation instead of a non-responsible firm through screening (Brekke and Nyborg, 2008). This would be done by using their profile as a screening device in order to obtain more productive employees in line with the principles of sustainable development (Brekke and Nyborg, 2008). This indicates how sustainability initiatives have been implemented by management in order to develop a like-minded culture within the organisation trickling down from the management.

Conversely, 20% (12 of 60) interviewees noted that leadership commitment was not important driver. This suggests that interviewees may miss-interpret the importance of leadership commitment as this can affect the reputation, shareholder values, benefit to social groups and the enhancement of the physical environment (CRI, 2003). In summary, for the implementation of sustainability initiatives or changes in strategy it can be foreseen leadership commitment is needed. Leadership commitments are

necessary for the transition of efficient systems focused on resource management and cost reduction alongside leadership, culture, innovation and resources.

5.3.4 STAKEHOLDER'S REQUIREMENTS

In the study, 75% (45 of 60) interviewees pointed out that stakeholder's pressure is a very important driver for implementing sustainability initiatives within their organisation. Stakeholders are individuals, groups or organisations that have an interest in what a police service has done, is currently doing, or might do. Stakeholder requirements/pressure is a key driver as stakeholders are able to influence what a police service does depending on their social or political power. In policing, the community is one important stakeholder. Other stakeholders include: their employees, their union, suppliers and potentially those outside of the local community with an interest in a police service's actions. For instance, one of the interviewees noted that:

“Our organisation vision, mission, values and strategic priorities related to sustainability drive by various stakeholders pressures. For example, one of our strategic priorities keeping Abu Dhabi emirate secure, safe and at the same time sustainable. This is the priority of the UAE Government. Therefore, in our organisation we are working and practising the police work keeping in mind protecting environment and let it clean and free from waste”.

The above statement acknowledges that organisations are under pressure to react to targets set by stakeholders in order to comply with their needs and interests. However, 25% (15 of 60) stated that stakeholders' pressure is fairly important driver. This may be due to the fact that these individuals have a lack of knowledge of the pressure of stakeholders' upon their organisation or the fact that different organisations/departments have different objectives.

In summary, as organisations have to react to stakeholders pressures, this will bring a greater sense of conflict between organisational objectives. It will be difficult for organisations to prioritise the interests of their stakeholders. In today's world, organisations of all types are well aware of the importance of understanding and catering to stakeholders, therefore, an organisation needs to satisfy, and impress stakeholders.

5.3.5 GOVERNMENT LEGISLATION

The UAE government has recognised alongside the international community sustainable development needs to become a key factor in order to address key problems such as climate change. The emphasis and attention towards sustainability is made clear in the following statement, “Our long term economic growth relies on protecting and enhancing the environmental resources that underpin it, and paying due regard to social needs. As part of our commitment to enhance wellbeing” (UAE, 2014). In this study, 67% (44 of the 60) of the interviewees stated that another key driver for implementing sustainability initiatives was due to government regulation. The UAE Government-funded programmes and projects are generally the vehicles for climate change response rather than specific legislation. At federal level, the UAE is developing two key frameworks for climate change mitigation: the Green Growth Strategy and the Federal Energy Policy. The former seeks to decouple economic growth through greenhouse gases and other environmental impacts through policies and targets across seven key sectors (Grantham Research Institute, 2015).

In the UAE there has recently been a consensus to legislate for energy efficiency, which suggests the government has realised the benefits of energy efficiency. Indeed, new building energy codes known as the green building codes are the first step towards developing sustainable policies in the UAE. These new codes conform to the most demanding global standards, which were developed in line with the International Code Council (ICC) whom are responsible for advising US regulators. In addition to this, UAE government put in place the Estidama program and the Pearls green building rating system, which is integrated with the building code. This means that it is enforceable and along with the launch of the Emirates Green Buildings council is an important step towards low carbon emission buildings in the UAE (Radhi, 2010). For instance, one of the interviewees noted that:

“So that’s what’s going to happen and we have to hope what we do would fall in line with that regulatory approach. If they don’t have the regulations of course the industry won’t get there, the regulations would be necessary.”

The aforementioned view of the interviewee clearly suggests that Government regulation/legislation is also an important key driver for implementing sustainability

initiatives. The above quote highlights inevitability of sustainability demonstrating the success of the government's attempts to mainstream sustainability. The government's use of legislation has been effective as one of the quickest and certain methods of implementing change by ensuring an organisation remains competitive it must remain up to date with existing and emerging legislation (Waddell, 2008). Many organisations are regulatory compliance by voluntarily developing and certifying their environmental management systems under ISO 14001 guidelines. To sum up, it is clear that government mandatory legislation plays an important part in driving police service organisations towards implementing sustainable practices.

Overall, section 5.3 has addressed the second research objective of this study, which is "to explore and document the key drivers for implementing sustainability initiatives in the Abu Dhabi public sector organisation". Therefore, section 5.3 has answered the second research question which is "what are the key drivers that have fuelled the need for implementing sustainability initiatives in the Abu Dhabi public sector organisation" of this study.

5.4 SUMMARY

Milne et al. (2006) noted that sustainability has always been difficult to assess directly, since it is an abstract and multidimensional concept. Therefore, organisations do face significant challenges in taking the first steps towards implementing sustainability initiatives. For instance, understanding the underlying concepts of sustainability, changing the attitudes of employees and customers as well as new policy or legislation which encourages the uptake of the sustainability agenda is a challenge. To improve sustainability performance, therefore leaders have to recognise and better understand the concept of sustainability.

From this study, it is apparent that the environmental sustainability dimension predominates. The environmental sustainability considers the impact of organisation activities on the quality and quantity of natural resources, the environment, global warming, ecological concerns, waste management, reductions in energy and resource use, alternative energy production, and improved pollution and emissions management (Townsend, 2008). The social sustainability dimension is the second most stated perceptions of the Abu Dhabi public sector organisation. Although in the past, the

concept of sustainability tended to be focused on environmental issues, as in the framing of a balance between economic growth and ecological carrying capacity, more recent understandings of the term have come to include social responsibility aspects as well (Dempsey et al., 2009). The social dimension emphasises the impact of organisations on the social systems within which it operates. The economic dimension of sustainability is the least stated perceptions of the Abu Dhabi public sector organisation on sustainability.

Economic sustainability is fundamental to organisational financial success – in the long run the organisation simply cannot survive if expenditure exceeds income (Haugh and Talwar, 2010). Throughout the data there has been a strong undertone towards the economic aspects of sustainability. Where for each question the most emphasised aspects are an economic perception of sustainability, cost reduction as a driver and outcome along with costing as the biggest challenge facing the implementation of sustainable initiatives. This demonstrates a conscious attitude towards attaining competitive advantage from these measures, illustrating the potential for operational effectiveness and cost reduction provide a significant part of the reason why sustainable measures are implemented.

The triple bottom line approach wasn't emphasised in this study. Neubaum et al. (2009) argue that sustainability in business management requires a firm's environmental and social responsibilities to be given the same weight as its economic concerns. The triple bottom line approach therefore looks at how organisations manage and balance all three responsibilities (i.e. economic, environmental and social) and attempts to reconcile these inter-related spheres of activity for a more balanced view of overall business performance. This indicates a difference between their perceptions and practice of sustainable development. Contributing towards this inconsistency is likely to be a lack of education towards the triple bottom line approach as highlighted by (Renukappa, et al., 2012) and Sourani and Sohail, (2012). It is likely interviewees were more familiar with the earlier interpretations of sustainability where there was a strong emphasis towards the environmental side (Zabihi, et al., 2012).

Overall, the following inferences and implications could be documented:

- Research results suggest that sustainability is perceived in a distinct concept (i.e. only environmental or social or economic). It is worthwhile to consider a holistic view of sustainability rather in isolation. The economic, social and environmental sustainability dimension elements show a nature of interdependence between them. Over emphasising one dimension can negatively impact the two others. Finding smart trade-offs is, therefore, a necessity if sustainability is to be reached.
- There is no uniform understanding of the concept of sustainability within the Abu Dhabi public sector organisation. The concept continuously keeps on developing theoretically and methodologically. Given the current context, it seems unlikely that a coherent, universal conceptual approach to the concept of sustainability will emerge in the near future. However, while this conceptual development takes place the principles of sustainability continues to be implemented at various levels.
- Although the importance of sustainability is broadly acknowledged in the Abu Dhabi public sector organisation, there is a significant lack of a common and operationalised understanding on the concept of sustainability. Therefore, an awareness-raising training programme on the concept of sustainability needs to be developed and deployed. The existing education and training programmes need some reorientation.

Overall section 5.2 has addressed the first research objective of the current study, which is “to investigate and document the perceptions of Abu Dhabi public sector organisation on the concept of sustainability”. Therefore, section 5.2 has answered the first research question which is “what does sustainability mean to Abu Dhabi public sector organisation”.

The section 5.3 has addressed the key drivers that have fuelled the need for implementing sustainability initiatives in the Abu Dhabi public sector organisation. Five key drivers have fuelled the need for implementing sustainability initiatives. They are: reputation building; reducing operating costs; leadership commitment; stakeholders’ requirement; and Government regulation.

The implementation of environmental, social, and economic aspects is said to manifest in the organisation obtaining an improved reputation, this was emphasised equally within the data alongside management commitment. The environmentally and socially motivated actions taken place contribute towards an enhanced corporate image and improved reputation (Collins, et al., 2007). The operational effectiveness as discussed earlier allows for a number of methods where value is added through the reduction of cost and efficient practices (Flint, 2000). This also translates to attracting employees where the cost reductions are developed into a distinctive competence (Mooney, 2007).

If the organisations attempt as attracting more appreciation from citizens then this would provide a clear case of competitive advantage being achieved through the adoption of sustainable measures. Adhering towards proving quality is something that is lacking into and working towards this undertaking a holistic/systemic view allows greater citizen communication and quality obtained through meeting their requirements. This is recognised as the culmination of all other aspects of sustainable development discussed such as innovation, cost reduction and keeping up with the competitors being brought together to result in additional value being obtained to the organisation.

The study results demonstrated that a number of interviewees view sustainability as a crucial part of the organisation as demonstrated by a number of statements. There are a number of reasons for this with the primary reason being Government legislation. Keeping up with Government legislation is seen as a major driver from the data, this may seem to contradict with competitive advantage as it is forced upon the organisations to use these initiatives. If an organisation received benefit from implementing certain factors they would not need to be forced by the regulation to act according to the sustainable initiatives giving weight to claims from Ambec, et al. (2010).

Also differentiation is an aspect of competitive advantage highlighted by Porter (1990) but when all organisations implement sustainability this decreases the impact of this factor. This does not mean that there can be no means of differentiation as an organisation can act on environmental and social aspects exceeding legislation and standards. The fact that organisations are forced to comply with regulation and industry changes does not necessarily mean that this removes the prospect for competitive advantage. According to Porter (1990) strict environmental constraints often enhance

competitive advantage, describing government regulations and industry standards as a stimulus for competitive advantage ultimately leading to competitive advantage.

Overall, the following inferences and implications could be drawn:

- A complex mix of political, economic, social and environmental forces drives organisations to implement sustainability initiatives.
- Before organisations imbed sustainability initiatives they need to understand and recognise key drivers, which are pushing them towards implementation. Therefore, understanding the drivers for implementing sustainability initiatives is important.
- Understanding drivers could assist decision makers to develop sustainability-related strategies based on the drivers.

Section 5.3 has addressed the second research objective of this study, which is “to explore and document the key drivers for implementing sustainability initiatives in the Abu Dhabi public sector organisation”. Therefore, section 5.3 has answered the second research question which is “what are the key drivers that have fuelled the need for implementing sustainability initiatives in the Abu Dhabi public sector organisation” of this study. The next Chapter 6 will discuss the key sustainability initiatives that have been implemented in the Abu Dhabi public sector organisation to effect change.

CHAPTER 6 : KEY SUSTAINABILITY INITIATIVES IN THE ABU DHABI PUBLIC SECTOR ORGANISATION

6.1 INTRODUCTION

The purpose of this Chapter is to present the key sustainability initiatives that have been implemented in the Abu Dhabi public sector organisation. The results are based on the perception of the 60 participated interviewees. The findings are also substantiated with the relevant literature. In this study, interviewees were asked to list and describe key sustainability initiatives that have been implemented in their organisation through face-to-face interviews. This study revealed ten key initiatives under the umbrella of sustainability that have been implemented in the Abu Dhabi public sector organisation (see Table 6.1). In the order of implementation, they are: Health, safety and wellbeing initiatives, community engagement initiatives, resources efficiency initiatives, sustainable procurement initiatives, sustainable transport initiatives, change management initiatives for dealing with sustainability initiatives, green technology, embedded culture for sustainability, specialised knowledge creation, and incentive system to promote sustainability initiatives. Each of these key dimensions is discussed in details from section 6.2 to 6.11. Finally, section 6.12 summarises the key findings. In doing so, Chapter 6 addresses the third research objective, which is “to investigate and document the key sustainability initiatives needed to effect change that are currently being implemented in the Abu Dhabi public sector organisation” and third research question, which is “what are the key sustainability initiatives currently being implemented in the Abu Dhabi public sector organisation needed to effect change” of this study.

Table 6.1: Implementation of sustainability initiatives in Abu Dhabi public sector organisation (N=60)

Sl. No	Sustainability initiatives implemented	Percentage of interviewees cited (N= 60)
1	Health, safety and wellbeing initiatives	60 (100%)
2	Community engagement initiatives	57 (95%)
3	Resources efficiency initiatives	54 (90%)
4	Sustainable procurement initiatives	52 (87%)
5	Sustainable transport initiatives	51 (85%)
6	Change management initiatives for dealing with sustainability initiatives	48 (80%)
7	Green technology	45 (75%)
8	Embedded culture for sustainability	42 (70%)
9	Specialised knowledge creation	41 (68%)
10	Incentive system to promote sustainability initiatives	36 (60%)

6.2 HEALTH, SAFETY AND WELLBEING INITIATIVES

A police force is a service-intensive organisation with a significant proportion of its employees working in direct contact with its customers, the general public. The police, like any other public sector organisation, need to develop and maintain a strong relationship with its human resources in order to effectively perform crime fighting and service provider roles (Abdulla *et al.*, 2008). Although, not every workforce has to deal with the kind of everyday stresses and risk to health faced by the police (Hayday, 2008). In particular, police service men and women in the line of duty can face a number of elements causing musculoskeletal disorders (Achim, 2014). According to Hayday (2008) once members of staff are away sick, some forces use private medical care to provide scans or operations as a way of shortening sickness absence periods. A number of managers recounted individual cases of an employee being offered private medical treatment and they were returning to work more quickly.

In the study, overwhelmingly, 100% (60 of the 60) of the interviewees noted that their organisation had implemented health, safety and wellbeing initiatives. The high level of implementation of health, safety and wellbeing initiatives in the interviewed organisation may be due to the direct correlation between healthy staff and range of bottom line benefits including reduced absence, recruitment, retention, higher morale and loyalty, productivity, quality and customer satisfaction. For instance, one of the interviewees noted that:

“We recognise that personal well-being is essential for employees to effectively build the organisation’s innovation and creativity, adding competitive advantage in an increasingly competitive global environment. We aim to improve the work-life balance by offering choices to individuals to select as they see fit, alongside the range of promotions based on encouraging healthy lifestyles and a positive work-life balance”.

The aforementioned view of the interviewee reveals that organisation is implementing a range of employee well-being initiatives in order to gain competitive advantage. Clearly, the interviewee’s view suggests that organisations are becoming increasingly conscious of the need to attract and retain staff and to accommodate them in achieving a better balance between their working and non-working life.

Most often cited initiatives under the umbrella of health, safety and wellbeing initiatives include: health and safety initiatives, employee counselling, stress reduction programmes, short-term counselling services, employee assistance programmes, and flexible working schemes. For instance, since transportation division workforce is required to work ‘24/7’, it contributes to employees feeling overworked, stressed, and experiencing negative consequences to their physical and mental well-being. Of the interviewees, many believe that responsibility for workplace stress falls equally on both the employer and workforce and they expect the number of stress-related issues to rise in the industry. Some of the workplace stress reduction programmes implemented in the interviewed organisation include: work/life balance initiatives, counselling, paid holidays, and organising team building events.

According to Achim (2014) studies have shown that physical fitness may have an effect on reducing absenteeism. In other words, fitness can have a direct impact on reducing

organisations' costs. In the UK, the Metropolitan Police Service have employed 50 full time health care staff, including counsellors, nurses and doctors, to deliver sickness support, health in the workplace, medical and fitness programmes. This includes, fitness facilities, medical screening, money services, a chaplain and trauma support (Metropolitan Police, 2012).

In addition, the policing occupation is considered stressful because it involves dealing with individuals and making speedy decisions that could have serious physical, health, social or other impacts upon the public (Kyriacou, 2001). Police officers are exposed to emotionally demanding interpersonal interactions on a daily basis, requiring them to regulate their feelings and expressions (Bakker and Heuven, 2006). As well police officers in many OECD countries such as the UK, USA, and New Zealand have experienced increased levels of stress due to bigger workloads, predominately resulting from a major shift in governance to focus on output and accountability (Dick, 2011). In order to react to stress disorders, for instance, the Metropolitan Police Service has a fast track psychotherapy scheme where employees suffering from stress related illnesses and who meet specific criteria are offered a fast track entry to psychotherapy services to deal with issues. The aim of this intervention is to return employees to full operational capability at the earliest opportunity (Metropolitan Police, 2012). Therefore, the Abu Dhabi Public sector organisations need to embed such employee well-being initiatives.

6.3 COMMUNITY ENGAGEMENT INITIATIVES

Waddock and Smith (2000) noted that efforts to improve community relations can improve relationships with key stakeholders. Therefore, many public and private sector organisations have started to implement community engagement initiatives as part of stakeholder relationship building exercise. Community engagement initiatives shoulders economic development in the form of grants individuals or community programmes, in addition to budget support, staff – both managers and employees – are involved directly in activities such as planning, training, and education in community projects, and in individual help (Porter and Kramer, 2011).

Of the interviewees, 95% (57 of the 60) noted that their organisations had implemented community engagement initiatives. Interestingly, some of these interviewees noted that their community engagement initiatives such as supporting local education institutions,

employee volunteering activities actually increased their productivity and ensured a strong future workforce. Furthermore, many of the interviewees believe that 'soft issues' (e.g. enhancement of public sector image and trust) top the list of investment in the community engagement programmes. Most often cited initiatives under the umbrella of community engagement initiatives include: supporting local education institutions in the form of capital grants, research grants, knowledge transfer grants, scholarships and fellowships, community assistance projects, participation in civic action, membership in social forum, skills and technology transfer, grants, donations, supporting local charities and sponsorships, and capacity building programmes. For instance, most of the interviewees believe that the key reason for supporting local education institutions is to increase the pool of trained personnel.

For instance, one of the interviewees noted that:

“We have participated in publicising green applications strategy through 24 seminars over the past three years. In addition, 468 environmental awareness workshops have been conducted that have contributed greatly to the overall awareness rising. Also, we have executed sets of personal initiatives involving maintenance of natural resources and contributing to the reduction of pollution such as participating in the event of tree plantation, 'Earth Day' and the use of public means of transport. Also, we funded and managing a full-fledged zoo for rare animals. In addition to its contribution to the biological and environmental variety, this zoo also features facilities running on solar energy and adopting waste recycling”.

From the above statements it is clear that organisation had implemented various community engagement initiatives. As Fombrun, Gardberg, and Barnett (2000) point out, that effort to improve relationships with communities can enhance the organisations institutional legitimacy in those communities. Such efforts can also help organisations to build up critical reserves of reputational capital that could potentially mitigate problems from other stakeholder groups in the event of management challenges. However, 5% (3 of the 60) of the interviewees noted that why and what to pursue in community engagement initiatives. The greatest concerns expressed by these interviewees for implementing community engagement initiatives in their organisation

include: too expensive, difficulty in identifying real social issues, difficult to track efforts and measure benefits, difficulty in evaluating and choosing a strong social cause-related partner.

As Kanter (2006) noted traditional monetary support and volunteer programmes have produced little substantive social change because they fail to fully engage the unique skills and capabilities of business. The new approach such as capacity building programmes will generate real solutions to social problems because it provides a forum for learning, innovation, and development.

6.4 RESOURCES EFFICIENCY INITIATIVES

Of the interviewees, 90% (54 of the 60) noted that their organisation had implemented resources efficiency initiatives. Most often cited initiatives under the umbrella of resources efficiency initiatives include: water saving initiatives, energy saving initiatives, removing process in-efficiencies, reducing material intensity of services, improving service quality, reducing energy intensity of the services, enhancing material recyclability, upgrading existing technology with new technology (e.g. changing old cars with new energy efficient cars), and re-using materials (e.g. paper recycling, double side printing), and maximising the sustainable use of renewable resources.

Energy saving received notable amount of emphasis, as noted before energy saving is a means of reducing costs however the statements aligned towards this point were related towards initiatives looking to be developed. Cost reduction comprised of a high amount of data whereas this differs significantly with the data for energy saving. Of course cuts in energy usage are as previously discussed caused in due part from the legislation and targets related towards energy emissions. The impact of these targets is shown in the following statement taken from an interview:

“My colleagues in the building side are looking at zero carbon buildings, zero carbon cities, so we do quite a lot of work there towards sustainable transport development. At our department we recycle vehicles tires, plastic, water, and oil”.

This statement is a reflection of the UAE government's goal to have carbon neutral and how the organisation is working towards acting towards this goal. Here it is seen that initiatives of the organisation are influenced by the driver of sustainability.

As previously discussed this also provides an operational effectiveness through being able provide a service through a greater efficient use of energy. One explanation towards energy savings not being highly emphasised from the data could be that they view it as an enforced measure that they feel a lack of an independent approach towards this issue. However doesn't explain why cutting energy costs were detailed by a number of interviewees as a cost reductive measure. This could be due towards organisations prioritising the act of cost reduction which could be attained through saving energy compared to saving energy with no concern towards the cost implications.

Waste management was also emphasised by a number of interviewees however with a less compared to energy savings. Waste management is also used as a cost reductive measure highlighted within the drivers but is also an initiative organisations are looking to implement.

Waste management comes from the principles of operational effectiveness closely tied towards competitive advantage, where the treatment of waste is geared towards attaining the maximum value before disposal.

Tam (2008) highlights the benefit of recycling waste where it reduces demand for new resources, cutting down transport and energy costs and utilising waste which would otherwise be sent to a landfill. These benefits are shown in the following quote obtained from an interviewee:

“We provide environmentally-friendly maintenance services and dry washing to vehicles used by our services, using high-end techniques. Also, we do recycle the carwash water at Workshop and Transportation Department. Water saving equipment is fitted in water faucets in many buildings throughout the G.H.Q. and movement sensors are used to turn lights off and on to ensure reduce electricity consumption. We also implemented modern technologies like the use of solar powered speeding cameras and self-lighting stickers in the department of central operations and operation rooms”.

This statement is a reflection of the organisations commitment to sustainable development goals.

In the early part of this twenty first century, public and private sector organisations started to search for efficiency and competitive advantage, the so-called ‘win-win’ solutions that minimised resource consumption and wastes (Holliday, Schmidheiny and Watts, 2002). The idea of doing more with less appealed to the mind-set of public and private sector leaders. For example, many organisations have implemented various eco-efficiency initiatives to reduce resource consumption. Eco-efficiency is perceived as a win-win solution, enabling the twin goals of economic growth and environmental protection to be maintained.

6.5 SUSTAINABLE PROCUREMENT INITIATIVES

Sustainable procurement is a process where organisations can meet their needs for goods, services, works and utilities in a way that achieves ‘value for money’ on a whole life basis in terms of generating benefits not only to the organisation, but also to society and the economy, whilst minimising damage to the environment (DEFRA, 2006).

In this study, 87% (52 of 60) of the interviewees noted that their organisation had implemented sustainable procurement initiatives. For instance, one of the interviewees in the current study noted that:

“Since 2005, we have adopted specific policies to manage our relationship with partners and suppliers through which the roles and responsibilities are outlined. Twenty eight organisational partners have been identified who are responsible for the development of our environmental performance and help in further advancing and achieving the goals of environmental initiatives. Therefore, we have reviewed the environmental and social impacts of partners’ and suppliers’ activities. Furthermore, we have a different memorandum of understanding and contracts with the various categories of partners and suppliers and closely we work with them to address any obstacles, problems or incidents related to the social or environmental issues. We also enforce regulations and

conditions that aim to reduce any expected social and environmental effects from their services, products or projects. Materials used are carefully chosen to ensure minimal footprint for the environment. All building contractors are obligated to provide an on-site engineer approved from Abu Dhabi Urban Planning Council to ensure the requirements of sustainability and the standards of the Pearls System in buildings. The Department of Purchasing and Warehouses has also invited a member from the Section of Environmental Health and Safety to the board of the committee of evaluation of purchases and proposals to ensure all bids are compliant with environmental and social requirements”.

Analysis of the above statement clearly suggests that organisation had implemented various sustainable procurement initiatives. Most often cited initiatives under the umbrella of sustainable procurement include: monitoring suppliers’ environmental and social performance, collaboration with suppliers’ (e.g. involving suppliers in the decision making process), logistical integration with suppliers, purchasing sustainable materials from local suppliers, requiring health and safety measures and/or standards of suppliers, all suppliers should strictly comply with laws, regulations and social standards, discrimination, working hours, employee compensation, ethical behaviour and rights to minorities.

6.6 SUSTAINABLE TRANSPORT INITIATIVES

The UAE’s greenhouse gas emissions in 2013 saw the country’s transport sector responsible for 22 per cent of total emissions, amounting to 44.6 million tonnes of carbon dioxide (UAE Ministry of Energy, 2015). Similarly, the UK transport sector is responsible for just over a quarter of all carbon dioxide emissions, amounting to 116.9 million tonnes of carbon dioxide (Department of Energy and Climate Change, 2015). In other words, as all police forces main way of enforcing laws are through the use of transportation, they have an import part to play in reducing this, through sustainable transport.

Of the interviewees, 87% (51 of 60) noted that their organisation had implemented sustainable transport initiatives. For instance, one of the interviewees in the current study noted that:

“We have a number of gas guzzling super cars in our fleet, thus one would expect our carbon footprint to be really big. Indeed, these cars are not cost or energy efficient. We set to become the world’s first police force to go carbon-neutral; an agreement has been signed with carbon management organisation to jointly develop initiatives. If we achieve this, we are the first carbon-neutral police force to achieve this feat, giving us competitive advantage through differentiation. Therefore, we had implemented hybrid cars, bio-fuel technology and compressed natural gas vehicles, which are less polluting than regular diesel or petrol vehicles”.

Analysis of the above statement clearly suggests that organisation had implemented various sustainable transport initiatives. Most often cited initiatives under the umbrella of sustainable transport include: reducing the number of unnecessary car journeys, encourage greener travel and maximise the efficiency of their fleet to reduce their carbon footprint; promoting the use of conference call and video conferencing facilities; flexible working and home working to reduce employee travel; developing travel plans to encourage employees to travel more sustainably; maximise the efficiency of the existing vehicle fleet; consider alternative less polluting fuels for use in their fleet vehicles; investigate the potential to use alternative vehicle technology; encourage employees to follow eco-driving principles and procure vehicles with low carbon dioxide emissions.

According to the British Transport Police (2015), carbon emissions from fleet vehicles have decreased by 6 per cent compared with 2013-2014 and 2009/10. Indeed, these reductions are due to a more efficient fleet and the rollout of more electric vehicles. The main reason for this is that the National Association of Police Fleet Managers (NAPFM) set up the Home Office Procurement Framework. This framework works to replace old vehicles with more fuel efficient ones. Under this framework vehicles are replaced based on their usage and this is reviewed every year. The carbon emissions (g/km) has been reduced and is currently under 120g/km for non-response vehicles,

which is below the national recommended rate. In 2013-14 there was only one hybrid electric Vauxhall Amperas, after their initial trial was a success this was increased to six in 2014-2015. The vehicle has a range of 300 miles on a fully battery charge. British Transport Police's (BTP) annualised average fuel efficiency is 75 mpg, almost double that of a typical non-response vehicle. The mix of eco-friendly vehicles within the fleet will be further expanded in 2015-16 with the introduction of more hybrid vehicles. In addition, to this telematics units are currently being trialed; this system will enable the fleet team to improve vehicle deployment and monitor vehicle behaviour.

6.7 CHANGE MANAGEMENT INITIATIVES FOR DEALING WITH SUSTAINABILITY INITIATIVES

The success rate for change efforts is not ideal (Beer and Nohria, 2000). Doppelt (2009) argued that for an organisation to make the kind of transformation to become truly sustainable, power and authority must be skilfully distributed among employees and stakeholders through effective information sharing, decision making and resource allocation mechanisms. This is clearly an issue for the leaders and managers of organisations.

Of the interviewees, 80% (48 of the 60) noted that their organisation had implemented change management initiatives for dealing with sustainability initiatives. Most often cited initiatives under the umbrella of change management initiatives include: a written environmental policy, a written human resources policy, a written sustainable procurement policy, and a specific manager responsible for environmental management.

Maak and Pless (2009) suggest that it is the responsibility of leaders to develop themselves as agents of world benefit and, indeed, there seems to be a growing willingness among some public and private sector leaders to spend time, expertise and resources to help seek solutions to some of the most pressing global problems and to drive their organisations towards sustainability agendas. Doppelt (2009) recognise that change in the organisation affects not only its structure and culture, but also the personal management styles of its leaders; thus managing change is an essential part of leadership.

6.8 GREEN TECHNOLOGY

Information technology has enormous potential to enable systems and processes to be automated; to provide officers with better information; and to support them in performing more tasks and activities while remaining visible to their communities (HMIC, 2014). Of the interviewees, 75% (45 of the 60) noted that they had implemented various green technology initiatives. For instance one of the interviewees noted that:

“Our organisation is committed to providing all key officers with a personal tablet computer. Therefore, we have implemented a Police app, it is a shining example of technology in motion; at the gentle tap of a smartphone screen accidents can be reported, fines paid, crimes reported, apply for official documents and take directions to your closest police station. It even has an SOS button to press for need of rescuing by helicopter. For example, this has removed the need to prepare paperwork for a residence visa medical, which usually involved half the morning spent standing in multiple queues can now be completed online and paid in a few minutes.

Analysis of the above statement reveals that organisation has implemented various green applications. In consequence of this, officers will be able to work more efficiently. As electronic statements can be introduced and mobile crime reporting, enabling crime numbers to be given to victims at the scene of the crime. Thus, rather than filling in forms a number of times, officers can complete tasks once and submit the information back to the central system remotely. Indeed, this would increase officer mobility and help to fit in with the aim of many police service organisations of increasing officer visibility. In other words, technology such as tablets will enable them to spend more time out on patrol and make them more accessible to the communities they serve (City of London Police, 2015).

In addition, officers could have access to more information while out on patrol, enabling them to make better decisions. As result, while on patrol officers could be alerted to properties where someone has broken a curfew, or to a pattern of repeated anti-social behaviour at a certain time of the night. Furthermore, mobile technology will

reduce officers' time away from office, thus by reducing the need for office space (London Assembly, 2013). Similarly, to reduce time at office the City of London Police implemented a computer refresh programme providing staff with new laptops. For instance, staff will have the flexibility of working from a variety of places without necessarily having a fixed base to return to (City of London Police, 2015). Yet, by simply providing officers with mobile devices may not guarantee greater efficiencies and may not achieve value for money. Indeed, the impact on officer visibility can vary across forces (London Assembly, 2013).

Furthermore, social media has the ability to help officers interact with the public and improve confidence in the communities they service (London Assembly, 2013). For example, the City of London Police has recently embraced social media with enthusiasm to interact on a more personal level with the communities it serves. Accordingly, it is used to deliver up-to-the minute city-based and wider law enforcement, safety and travel information. In addition, social media is used to create videos to raise public awareness of a number of key issues (City of London Police, 2015).

There are various technologies, such as predictive crime mapping, body cameras and facial recognition software. Predictive crime mapping first arose in Los Angeles, the Los Angeles Police Department (LAPD) uses a computer programme that analyses years of crime statistics and other factors such as the weather and then predicts areas where a crime is more likely to occur. The programme generates maps highlighting boxes indicating where the officers should be deployed. Indeed, when officers are not on radio calls, they spend as much time as possible within an area where crime is most likely to occur, which increases the chance of catching suspects. In consequence of this, after a six-month trial in one Los Angeles division, crime rates fell by 12% overall and by 25% for car theft. It is evident that predictive crime mapping can enable police service organisations to reduce crime and allocate resources more efficiently. Now police forces both inside and outside the UK, are using predictive crime mapping widely (London Assembly, 2013).

Furthermore, body cameras are being equipped to policing teams such as Staffordshire Police, as they believe it will act as a deterrent, increase officer safety and improve the efficiency by assisting with witness statements. In addition, facial recognition

technology will play an important part in the role of future policing, for tackling organised crime groups and identity theft. Surveillance drones are another technology which police service organisations are implementing as it is a cost-effective alternative to manned helicopters. For example, Merseyside Police was an early adopter of drones and the first organisation in the UK to arrest a suspected car thief with the assistance of a remote-controlled air robot. However, the use of drones is controversial and currently limited in the UK (London Assembly, 2013). Despite the success of these technologies, increased surveillance by police service organisations raises concerns over the privacy of the public. In other words, these technologies bring along human rights issues that need to be considered carefully, such as whether their use is both proportionate and necessary. In the same way, organisations need to be seen to be using the technology properly, in order to be worthy of the public's trust (London Assembly, 2013).

Dubai Police Force implemented a systematic approach for customer service which is linked to the strategic objective. The Technical Projects Accreditation committee supported by the General Department of Smart Service, holds regular meetings with senior leadership on a regular basis. Indeed, this committee aims to translate the vision and direction of leadership to implement projects that contributes to the achievement of strategic objectives (EFQM, 2015).

Under Dubai Police Forces department for energy and environmental issues, solar powered speed cameras have now been implemented (Al-Rifai, 2014). As many highways in Dubai are long desert side roads, this will proffer significant financial and environmental benefits for the police, due to avoidance of electricity cable installation. In the UAE, most of the major highways have speed cameras at regular intervals, but even that does not stop individuals speeding in between or even straight through them. It is interesting to note, Kantaria (2015) states that many drivers in the UAE actually set a budget for their speeding tickets, with many individuals allowing hundreds of pounds a month for the guilty pleasure of speeding, as unlike in the UK there is no points system in the UAE currently.

In order to deal this speeding issue traffic police in the UAE have recently started to use Google Glass, which allows them to upload images and videos directly to the police system. But far more important than this, is Dubai Police's secret weapon its ultimate grey camera. They realised that members of the public witness far more traffic

violations than the police possibly can themselves. As result, the Dubai Police Force launched an innovated community service called we are the police on its smartphone app. In other words, via the app members of the public can send pictures of motoring violations they have witnessed. Indeed, there are checks and balances to prevent abuse and the individual must not have captured the video or image whilst driving or the individual will be prosecuted. However, if captured evidence is ruled to be authentic, if it is uploaded within two hours from the same phone as captured it, and if it documents a real offence, a fine will then be issued. In particular, Dubai Police in order to implement this created a number of incentives, for example, members of the public whom report the highest number of genuine violations will be rewarded and honoured by Dubai Police Force (Kantaria, 2015).

Recently, Dubai Police has implemented an initiative which enables fines to be paid at kiosks, with almost a thousand e-kiosks across the UAE. This service is a collaboration between Dubai Police's Smart Services Department and Max Box Middle East (MBME), a kiosks and payment solutions company. Indeed, this initiative will make it more convenient for the public to pay fines. In addition, these new kiosks accept cash payments, which was not available in previous kiosks. As result, these new kiosks will help to reduce paper work as it electronic and help to free more time for police officers to focus on more serious cases or crimes (UAEinteract, 2015).

Ng and Ang (2011) commented on an innovation by the Singapore Police Force (SPF) called the short messaging service (SMS) helpline, which was established for the deaf, hard-of hearing and speech impaired (DHS). SMS is a joint initiative between the SPF and the National Council of Social Services (NCSS) to offer DHS members an avenue of communicating between the users and the police in times of emergencies. Indeed, this was developed through the principle of being customer-centric at the ground level. In other words, to listen to the public when possible and work with community partners to develop effective solutions.

It is clear, that modernising technology required to police communities and meet other organisational objectives is a mammoth task. However, once implemented may provide police service organisations to remove past stigma about lack of trust between the community and police service organisations. Indeed, the computer will never replace

good policing practices, but it is a much needed tool, especially as police service organisations manage reductions in funding.

6.9 EMBEDDED CULTURE FOR SUSTAINABILITY

In the study, 70% (42 of the 60) of the interviewees noted that their organisation had embedded culture for sustainability. An important aspect of embedding a culture within an organisation is to share responsibility of sustainability across the work force. This would allow all employees to work with a sustainable perspective. Given the fact that sustainability has become part of the organisation activities highlighted by a quote detailed below it should every professional should have an understanding of the issue and requirements. For instance one of the interviewees noted that:

“Sustainability isn’t niche; I think every sort of activity has some sort of sustainability in place. We have to take that on board because I don’t having a specialist is the right approach; everybody should have an interest in sustainability.”

This point matches with Rake and Grayson (2008) where they state sustainability and organisations responsibility are required by everyone not given to a “good-works” department. This creates standards which all employees adhere towards creating an embedded culture within the organisation.

With sustainability mainstream conscious since 1989 it is understandable that organisations would want to implement sustainability within their organisations as is indicated in previous quotes. Adopting a framework where sustainability is brought forward in employees minds is something that allows for collaboration to be developed amongst workforce bringing them together on a common goal. This is shown on the following statement attained from one of the interviewees:

“Our initiative is really embedded within our organisation all our employees go on training on “Beyond Zero” which is embedded through our staff and becomes part of our culture which makes us very competitive”.

The above statement overtly illustrates how the use of initiatives develops into a culture of the organisation leading to differentiation from competitors working towards

providing an advantage as highlighted by Porter (1985). This sustainability focused mind-set serves to provide a different outlook towards problems which where it will work towards obtaining a second or third order fit (Porter, 2008). This will serve to optimise the range of activities undertaken indicating a third order it is taking place, demonstrating the data matches alongside with Gupta and Benson (2011).

Training staff in sustainable issues would be an effective method to implement sustainability within an organisation, it allows for culture to be embedded through allowing staff to be familiarised with sustainability initiatives as seen in the previous quote. This is seen as the most crucial method to garner internal change, stated by Strategic Direction (2012). Alongside training education of sustainable issues is also crucial. The impact of graduate level education is seen to significantly increase the levels of which students behave in a sustainable manner (Brody and Ryu, 2006). This is displayed in a quote by one of interviewees:

“Graduates bring fresh ideas and outlooks.”

The quote highlights the pragmatic approach undertaken by graduates bringing the industry forward, this matches with York (2009) where a sustainable outlook encourages pragmatism within organisational change frameworks.

6.10 SPECIALISED KNOWLEDGE CREATION

In the study, 68% (41 of the 60) of the interviewees noted that their organisation had created specialised knowledge related to sustainability. Specialised knowledge is where the duties of implementing sustainability where undertaken by a specialist within the organisation. Having a single person or group of people would serve to give greater knowledge and experience to sustainable issues.

This approach would allow a single person to be given the sole responsibility to deal with sustainability issues, where they have the responsibility to implement sustainability within the organisation. This is seen in the following statement:

“Within the organisation at GHQ level one of the executive directors takes key responsibilities for sustainability and they are the policy makers, they write the policies on how we can meet the targets, how to exceed these targets moving forward and

how to keep the communities safely. We have environmental directors; they have been trained in the requirements that have to be achieved. Then we have employed some specialists in the environmental issues that sit within the transport workshop department. Furthermore, we are keen to raise knowledge of staff in the field of the environment and green applications targeted for the presence of 3,000 members' annual leadership of environmental awareness workshops".

Here it is seen that sustainability practices are emphasised within different positions within the organisation, this allows for greater focus on their responsibility. However this also highlights the reductionist approach where each aspect is separated into parts whereas sustainability exemplifies a holistic approach. As both embedded culture and specialised knowledge are both highly emphasised it is possible that they are both utilised in connection to each other. This can be through implementing a shared sustainability process but at the same time allowing there to be figureheads within the organisation that can offer guidance and most suitable solutions for the problems being faced.

6.11 INCENTIVE SYSTEM TO PROMOTE SUSTAINABILITY INITIATIVES

In the study, 60% (36 of the 60) of the interviewees noted that their organisation had created an incentive system to promote sustainability initiatives. Promotion is related to the encouragement of sustainable development within the organisation whether it is openly promoted and if any incentives are provided. This allows for attention to be given to certain solutions used which can then be highlighted by other employees in the organisation. This is shown in the following quote:

"What we did is all these small stories get published within our magazine which is shared with other people and I had a few queries from other people with people asking why I took this course of action and others have done the same. They have thought about reusability, recycling."

As seen from the statement the interviewee undertook an innovative sustainable action which had saved the company a large amount of money which was then placed in the

magazine. The interviewee then stated that similar actions were undertaken by other employees once they understood the context of the situation and how it benefitted the organisation. This serves to highlight the benefits of sustainable development and how it can be utilised to enhance the organisation performance. The approach to utilise media within the organisation is also shown in the following quote:

“We will have brochures annually where we try to show how much we have saved, how much waste we have prevented or how much landfill we have reduced and that is basically driven by a sustainability coordinator within our organisation.”

Experts such as Doppelt (2009) and Dunphy, et al., (2007) emphasised that reward system is a critical tool to implement sustainability initiatives. This is because it aligns with the interests of the senior managers, all employees, and suppliers. However, in this study the level of implementation of reward systems to promote sustainability initiatives is relatively low.

6.12 SUMMARY

The world is faced with unprecedented global economic, environmental, and social challenges. In an increasingly resource-constrained world, sustainability will continue to be a focus for public and private sector organisations, as they consider society’s long-term prosperity (Doppelt, 2009). Sustainability is about building a society in which a proper balance is created between economic, social and environmental objectives. This section discussed the ten key sustainability initiatives that have been implemented in the Abu Dhabi public sector organisation. In the order of implementation, they are: health, safety and wellbeing initiatives, community engagement initiatives, resources efficiency initiatives, sustainable procurement initiatives, sustainable transport initiatives, change management initiatives for dealing with sustainability initiatives, green technology, embedded culture for sustainability, specialised knowledge creation, and incentive system to promote sustainability initiatives.

For instance, embedding a culture for sustainability is a crucial aspect of sustainable development where second or third order fit is seeking to be implemented. This results in relationship and optimisation of processes within the organisation (Gupta and Benson, 2011). This contributes towards allowing greater operational effectiveness to

occur within the procedures alongside a holistic viewpoint. Conflicting against this was the fact that specialised knowledge was also prominent amongst the data where the responsibility of sustainability towards sustainability given to one person or group of people. This contradicts the goal of embedding culture where the responsibility is shared amongst the workforce. Although there appears to be contradiction between the two points the two factors can easily be reconciled. This is seen in a specific quote obtained from an interviewee detailing how the organisation's sustainability coordinator promotes sustainability through the use of brochures. Here the sustainability coordinator works to help integrate and embed the culture of sustainability through the utilisation of the organisations media indicating how the two outcomes are related. This shows a relationship between the three initiatives of incentive system to promote sustainability initiatives, embedded culture and specialised knowledge with the specialists promoting their knowledge throughout the organisation.

Overall, the following inferences and implications could be drawn:

- Overall, the outlook for improved sustainability initiatives efforts from the Abu Dhabi public sector organisation looks quite promising at present. This is because organisations those implement sustainability initiatives will benefit from improved reputation, better employee engagement, lower operating costs, and better relationship with key stakeholders. Clear and strong brand, should improve the public perception of the quality of services that public sector offers, and this in turn, will increase the trust, loyalty and will help reducing the perceived risk.
- The current study results suggest that the implementation of change management initiatives to deal with sustainability initiatives is still evolving in the Abu Dhabi public sector organisation. Taken together, the impact of leadership, sustainability-related policies, structures, reward systems, training programmes and performance reporting are key factors in successful implementation of sustainability initiatives. It is suggests that more clarity is needed on how the Abu Dhabi public sector organisation must change to meet the sustainability challenge, and how the necessary changes may be achieved. Therefore, there is a need for cross-sector collaboration to capture and share best and worst practices related to managing change associated with sustainability initiatives.

- Green technology has enormous potential to enable Abu Dhabi public sector organisation systems and processes to be automated; to provide officers with better information; and to support them in performing more tasks and activities while remaining visible to their communities. Green technology such as tablets will enable them to spend more time out on patrol and make them more accessible to the communities they serve. It is clear that modernising technology required to police communities and meet other organisational objectives is a mammoth task. However, once implemented may provide police service organisations to remove past stigma about lack of trust between the community and police service organisations. Therefore, there is a need for implementing more mobile governance initiatives in the Abu Dhabi public sector organisation. Furthermore, there is a need to develop and implement a strategic framework for implementing mobile applications.
- The scarcity of knowledge and expertise associated with sustainability initiatives is, and will continue to be, a huge challenge for the Abu Dhabi public sector organisation. Therefore, training programmes related to the management of sustainability-related knowledge will help leaders, managers, and change agents to better understand on how to craft and implement various sustainability-related strategies for competitive advantage.
- It is concluded that sustainability issues are complex, dynamic, and multifaceted. Most of the sustainability initiatives are inherently collaborative, as they relate to supporting the community and future generations. Therefore, to solve some of the global sustainability problems, it is important that key leaders and decision makers connect with other stakeholders to have a positive social impact.
- It is apparent that if public sector organisations do not implement and practice sustainability initiatives will pay for it in the long-term and maybe even in the relatively short-term, too.

The Chapter 6 has addressed the third research objective, which is “to investigate and document the key sustainability initiatives needed to effect change that are currently being implemented in the Abu Dhabi public sector organisation” and third research

question, which is “what are the key sustainability initiatives currently being implemented in the Abu Dhabi public sector organisation needed to effect change” of this study. The next Chapter (Chapter 7) will discuss the key challenges the Abu Dhabi public sector organisation face in implementing sustainability initiatives. Also, it discusses the impact of sustainability initiatives on the Abu Dhabi public sector organisation competitiveness.

CHAPTER 7 : THE KEY CHALLENGES AND BENEFITS OF IMPLEMENTING SUSTAINABILITY INITIATIVES

7.1 INTRODUCTION

This Chapter discusses on the key challenges the Abu Dhabi public sector organisation face in implementing sustainability initiatives. Also, it discusses the impact of sustainability initiatives on the Abu Dhabi public sector organisation competitiveness. The results are based on the perception of the 60 participated interviewees. The findings are also substantiated with the relevant literature.

In this study, during face-to-face interviews, interviewees were asked about key challenges their organisation face in implementing sustainability initiatives. Table 7.1 presents five challenges the Abu Dhabi public sector organisation face in implementing sustainability initiatives. Each of these key challenges is discussed in details from section 7.2.1 to 7.2.5. Finally, section 7.4 summarises the key findings. In doing so, section 7.2 addresses the fourth research objective, which is “to critically appraise and document the main challenges the Abu Dhabi public sector organisation face in implementing sustainability initiatives” and fourth research question, which is “what key challenges do Abu Dhabi public sector organisation face in implementing sustainability initiatives”.

Furthermore, in this study, during face-to-face interviews, interviewees were asked about their perceived positive impact of sustainability initiatives on competitiveness. Table 7.2 presents three key benefits the Abu Dhabi public sector organisation experienced due to implementing sustainability initiatives. Each of these key benefits is discussed in details from section 7.3.1 to 7.3.2. Finally, section 7.4 summarises the key findings. In doing so, section 7.3 addresses the fifth research objective, which is “to critically appraise and document the extent to which key sustainability initiatives contribute to competitiveness ” and fifth research question, which is “what positive impact does sustainability initiatives have on competitiveness”.

7.2 THE KEY CHALLENGES THE ABU DHABI PUBLIC SECTOR ORGANISATION FACE IN IMPLEMENTING SUSTAINABILITY INITIATIVES

Table 7.1 presents five key challenges the Abu Dhabi public sector organisation face in implementing sustainability initiatives. From the data in Table 7.1 it is evident that, leadership skills are the most important challenge for the Abu Dhabi public sector organisation. This is closely followed by cost of implementing sustainability initiatives, inflexibility, lack of knowledge, and difficulty in creating a culture of sustainability. In the following sub-sections (7.2.1 to 7.2.5) each of these challenges is discussed in detail.

Table 7.1: The key challenges the Abu Dhabi public sector organisation face in implementing sustainability initiatives (N=60)

Sl. No	Challenges face in implementing sustainability initiatives	Total number of interviewees cited (N=60)
1	Leadership skills	55 (95%)
2	Cost of implementing sustainability initiatives	50 (83%)
3	Inflexibility	45 (75%)
4	Lack of knowledge	40 (67%)
5	Difficulty in creating a culture of sustainability	36 (60%)

7.2.1 THE LEADERSHIP SKILLS

Of the interviewees, 95% (55 of the 60) noted that the lack of leadership skills for sustainability is one of the most important challenges their organisation is facing in implementing sustainability initiatives. Doppelt (2009) noted that the ultimate key to organisations successfully embracing the concept of sustainability into daily operations would require a new, exciting, and dynamic form of leadership. A type of leadership capable of awakening the ‘organisational conscience and soul’ while simultaneously engaging a wide range of stakeholders in stimulating intellectual dialogue designed to envision innovative solutions to our world’s most imperative sustainability issues such as climate change, poverty, health hazards is required to bring about change.

For instance, one of the interviewees noted that:

“We recognise that leadership skills require for implementing sustainability-related programmes in our organisation is a critical. Recently, in order to take a more transformational style to leadership, we launched the second level leader’s development program at the General Headquarters. This aims to prepare a number of distinguished competencies in our operations. In addition, the program provides studied programs according to the best international practices and serves to prepare Second level leaders with skills of distinction and leadership in order for them to improve readiness and responsibility for sustainability. Also, our leadership training programs include courses that focus on leadership competencies, laws and the exchange of expertise with distinguished police organisations from Singapore and the United Kingdom”.

The aforementioned view of the interviewee highlighted the importance of leadership skills and need of developing it for successful implementation of sustainability programmes. Notably, there are six failures of strategy implementation regarding leadership: top-down senior management style, unclear strategic intentions and conflicting priorities, an ineffective management team, poor vertical communications, weak co-ordination across functions, businesses or borders and inadequate down-the-line leadership skills development (Atkinson, 2006). An example of one of these failures has been recognised by London Assembly (2013) whom stated a UK force has not had a coherent ICT strategy for years and senior leadership in this area has been lacking.

Essentially, if organisations do not get the idea of the importance of understanding and determining factors that have an effect on or predict leadership style, then as result of this leaders’ will not be able to prepare for the future sustainability initiatives implementation effectively. In addition, will not be able to meet organisational and community needs and goals sufficiently. In the same way, lack of understanding of sustainability issues would reduce the aid in identifying, selecting, promoting and training effective police leaders (Sarver and Miller, 2014).

According to Sarver and Miller (2014) there are four leadership styles: transformational/emotionally intelligent, transactional/charismatic, authoritative and passive/avoidant. Transactional leaders use a system of rewards and punishments for motivation. In addition, with this style leaders do not attempt to implement change within the organisation or their subordinates. In the same way, do not influence their subordinates to go above their performance standards and only expect them to achieve goals that have already been established (Levasseur, 2005; Avolio and Bass, 2004). The main issue with this style is that as change is needed to improve the implementation of sustainable practices this lack of attempt will limit the effectiveness for the police service organisations. In addition, in order to improve competitiveness individuals must strive to overcome previous goals, which through transactional leadership cannot be obtained.

Furthermore, the authoritative leadership style is similar to that of transactional. Subordinates are not involved in the decision-making process and there is little interaction between leaders and subordinates. Indeed, leaders with this style tend to dictate tasks to be accomplished without identifying the larger goals and have little concern for the aspirations of subordinates (Bruns and Shuman, 1988). With that said, without interactions or lack of communication between leaders and subordinates this can lead to lack of trust and loyalty leading to them being less motivated to meet goals. In addition, without larger goals being identified this can lead to unclear strategic intentions for subordinates.

Passive/avoidant leaders are a huge issue for police service organisations as they do not want to be involved in decision making, avoid using their authority or taking responsibility. In addition, do not take action until a problem has already occurred and becomes serious. A passive/avoidant leader is less effective than transformational and transactional leaders and has negative effects on the outcome measures of extra effort, effectiveness and satisfaction (Avolio and Bass, 2004). In other words, if in police service organisations this style of leadership is found this will limit the implementation of sustainable practices, thus by reducing the ability to gain competitive advantage.

Accordingly, police service organisations should be striving towards a transformational leadership style. As transformational leaders have been found able to communicate the strategic vision and bring subordinates together in order to achieve change goals. In

consequence of this, through this style leaders will have the trust, admiration, loyalty and respect of their subordinates. Hence, will become more motivated and do more than originally asked to (Yukl, 1999). In short, transformational leadership will positively influence commitment to change, which is key for implementing new sustainable practices.

In summary, leadership is about preparing organisation with a sustainable development vision and values that resonate with the leadership team, all employees, and key stakeholders. It is about having the wisdom to interpret marketplace and stakeholder signals and steer the company in a direction that transforms environmental, social and economic risks into sustainable competitive advantage opportunities. Therefore, leadership is crucial for implementing sustainability initiatives. Leadership skills need to be reinforced by the organisation values, the funding of change programmes and willingness to transform organisations towards sustainability.

7.2.2 COST OF IMPLEMENTING SUSTAINABILITY INITIATIVES

The population growth of the UAE has been phenomenal; from 1 million in 1980, to 8.4 million by 2010 and 9.4 million in 2013 (Jayaraman *et al.*, 2015). Notably, police forces need to understand their likely future demand in order to determine and provide the capacity and capability they will need for the future. Indeed, this is standard practice across other demand-led organisations and police services should be no different. It is clear that understanding future demand is not easy; data and threat assessments cannot predict the future with certainty, assumptions need constant refreshing if they are not to mislead, the unexpected will often happen and the pressure of responding to current problems can dominate. This demonstrates that forces need to develop their understanding of likely future demand if they are to become more efficient and better match their diminishing resources to their priorities (HMIC, 2015). According to HMIC (2015), a recent inspection found that most forces in the UK were unable to demonstrate meaningful understanding of future demand. In addition, found out that the lack of understanding of future demand was adversely affecting how forces were planning for the future, both to meet their likely spending reductions but also to transform to sustainability.

Of the interviewees, 83% (50 of the 60) noted that the cost of implementing sustainability programmes is a concern. Costing would materialise as an imbalance between the factors of sustainability where the environmental and social pillars are prioritised ahead of the economic factors. The imbalance between these factors is shown in the following statement made by one of the interviewees from the engineering section:

“The main challenges are always going to be financial constraint, trying to provide a sustainable solution is not always the most financially viable option.”

There is an added cost with implementation of sustainable measures, compressed natural gas, water efficiency, solar panel roofs, recycled materials, green and smart technologies may be more sustainable however they incur added costs. This is further highlighted by the interviewee from the building procurement section:

“How economical the constructions are where someone may mention steel instead of concrete and it made the costs of the aspects four times greater, when looking at foundations instead of using a steel hollow section pile we have used a concrete foundation pile as it is much easier to do.”

Here we can see as well as the added cost there has been the time constraints added alongside the use of implementing a steel section. The time constraints have the potential to cause delays which could lead to increasing costs incurring with issues such as labour and missed deadlines.

Although many sustainable measures are illustrated to reduce costs through efficient use of energy there may be high initial costs which may take an exceedingly long period of time to payback. The long time it may take to pay of the installation of a sustainable feature is noted in the following statement taken from an interview:

“The financial incentives to put these initiatives in place aren’t there, the payback period for some of these alternative energies is astronomical, we’re talking about 300 years or so, if you were doing it for financial reasons you probably wouldn’t do it. If you were doing it because you needed to lower your carbon profile,

to be seen to be more sustainable then yeah that's more of a conscious decision than a financial driven one.”

This clearly demonstrates how a separation between environmental and social aspects from the financial would serve to provide complications for professionals looking to implement sustainable systems.

Efficiency use of resources is imperative towards having a competitive advantage developed within organisation. The high cost of certain sustainable measures provides an obstacle in the implementation of obtaining these efficiencies. Ultimately in order to obtain work towards operational efficiency effective management of all factors and risks have to be taken into account, devising the best possible way to obtain competitive advantage. This is seen in the following quote:

“What tended to happen is that over a period of time the organisation has found the most cost efficient way of delivering the different levels within the codes.”

This shows how organisations have realised and found the most effective method of meeting sustainable requirements. The statement demonstrates how professionals have devised method to avoid the costly sustainable initiatives while taking the financially effective ones. However with the increasing energy demands and legislation there is likely to be greater use sustainable initiatives where expenses are more likely to be felt.

It is interesting to note, that most forces in the UK concentrate on reducing spending due to the fact that this gave a quicker and simpler way of meeting budget reductions than delivering efficiency savings through transforming how they operated. As a result, forces have reduced their capacity without understanding fully the effect on their capability. Likewise, even where forces are planning or undertaking transformation programmes, these programmes are driven by the need to cut spending. According to HMIC (2015), almost all forces were planning for the future by working out the maximum size of the workforce they could afford and creating an operating model to fit. Yet, police forces should be designing the force to meet the likely future demand at a cost they could afford.

7.2.3 INFLEXIBILITY

Of the interviewees, 75% (45 of the 60) noted that the inflexibility is a key concern for implementing sustainability programmes in their organisation. As previously mentioned there are a number of commitments and legislations promoting sustainable development to be undertaken. While providing encouragement for an increase in sustainable initiatives they can also be restrictive in the necessary actions that can be done. The further quote obtained from one of the interviewees noted that:

“The planning council don’t see it as ticking boxes they see it as they have got to comply with initiatives and legislations as well, but like I say they’re dictating to you have to do this and that when there are bigger wins.”

Here the interviewee explains how he receives pressure from the local planning council to implement certain measures that may not be the most effective. When council initiatives force organisations to provide in effective methods of energy saving compared towards which would result in increased cost, this is a barrier towards having allowing sustainability form into a competitive advantage. This also diverts energy and finance on the possibility of a more effective method of reducing energy emissions. It is not just regarding energy that there could be inflexibility; regulations provide barriers in attaining a sustainable course of action when related towards improving society and the local community.

7.2.4 LACK OF KNOWLEDGE

Of the interviewees, 67% (40 of the 60) noted that the lack of knowledge for implementing sustainability programmes is a concern. According to Aikman (2014) a body of knowledge will leave when staff-retire, resulting in a critical gap to be left resulting in aspects to be under or over looked in the future. In fact, sustainability issues such as climate change require organisations to engage with its extended stakeholders and their communities. In addition to this, organisations also need to craft and deploy new sustainable business models to reduce environmental, social and financial risks of their daily business operations. This often calls for the creation, use and exploitation of new knowledge. Therefore, knowledge resources must be properly captured and shared to provide an environment for well-informed decisions. An effective management of knowledge associated with sustainability will help leaders, managers, and change agents

to understand better on how to craft and implement various sustainability strategies for their organisational competitive advantage.

7.2.5 CREATING A CULTURE OF SUSTAINABILITY

In this study, 60% (36 of the 60) of the interviewees noted that another key challenge for implementing sustainability initiatives is difficulty in creating a culture of sustainability. Processes relating to sustainability are dynamic rather than static, and organisations wanting to move down the path of sustainability need to reflect this. Change and dynamic relationships are integral to sustainable systems, and the culture of an organisation plays a vital role in driving the behaviours and attitudes that support rather than hinder change (Brown, 2005). Therefore, organisation needs to engage in a dramatic culture change in order to respond to sustainability challenges. For instance, Hoffman (1993) argues that where the sustainability values are incongruent with those of the individual, employee satisfaction will fall, leading to problematic human resource management and organisational inefficiency.

In this chapter, section 7.2 has discussed five key challenges the Abu Dhabi public sector organisation face in implementing sustainability initiatives. Therefore section 7.2 addressed the fourth research objective of the current study. Section 7.3 discusses the positive impact of sustainability initiatives on organisational competitiveness.

7.3 THE IMPACT OF SUSTAINABILITY INITIATIVES ON ORGANISATIONAL COMPETITIVENESS

Table 7.2 presents three positive impact of sustainability initiatives on the Abu Dhabi public sector organisation. From the data in Table 7.2 it is evident that, improved reputation is the most important impact of sustainability initiatives on the Abu Dhabi public sector organisation. This is closely followed by improved cost savings, and improved employee satisfaction. In the following sub-sections (7.3.1 to 7.3.3) each of this positive impact is discussed in detail.

Table 7.2: The perceived positive impact of sustainability initiatives on competitiveness (N=60)

Sl. No	Impact of sustainability initiatives on competitiveness	Total number of interviewees cited (N=60)
1	Improved reputation	50 (83%)
2	Improved cost savings	48 (80%)
3	Improved employee satisfaction	43 (72%)

7.3.1 IMPROVED REPUTATION

A seminal empirical study by Fombrun and Shanley (1990) provides evidence that social responsiveness, as measured by the level of organisational charitable donations and the presence of a separately endowed organisational charitable foundation, is positively associated with reputation. Williams and Barrett (2000) provide more evidence in support of a link between community engagement and organisation reputation. In addition, they show that the link between community activities and reputation is stronger among organisations that more frequently violate occupational health and safety and environmental regulations. They argue that, among other things, charitable giving can partially restore a firm's reputation after it has committed illegal acts (Williams and Barrett, 2000). Therefore, if sustainability initiatives are implemented effectively then organisations may be able to attain awards, which will help to boost the reputation and competitive advantage over others. However, if strategies are not sustainable then competitive advantage will be lost.

Of the interviewees, 83% (50 of the 60) noted that their organisations sustainability strategies had positive impact on their organisation reputation. Some of the interviewees noted that their organisation sustainability initiatives such as charitable activities, providing job opportunities for local communities, community education and outreach activities, environmental awareness programmes, and green procurement strategies are increased visibility and reputation. It is apparent from the above discussions that long-lasting sustainability initiatives are more likely to enhance the organisational reputation than just cash donations. This is a reflection of the basic sentiment that people need help solving their long lasting problems, not just donations (Prahalad, 2005).

7.3.2 IMPROVED COST SAVINGS

Of the interviewees, 80% (48 of the 60) noted that their organisations efforts in sustainability initiatives have improved cost savings. For example, one of an interview noted that through implementing resources efficiency initiatives such as waste recycling programmes have influenced material cost savings. This resulted in improved transport and workshop department productivity level and moral of the employees. The department has implemented inventory management Mobile App. By doing so, it has expanded access to its knowledge and information base, increased operational efficiencies, and reduced its operating costs. This example clearly suggests that sustainability initiatives are improving their cost savings. For instance, one of the interviewees noted that:

“I must proudly say that our department cost savings has improved over years because of our natural resources management behaviours and energy saving practices demonstrated over the years”.

Aforementioned view of the interviewee clearly suggests that organisations are experiencing cost savings through various sustainability strategies. Efforts to reduce environmental process costs can provide the context for process innovation and reveal other opportunities for redesigning value-added activities. Therefore, newly developed green processes or green technologies can enhance cost savings.

7.3.3 IMPROVED EMPLOYEE SATISFACTION

Of the interviewees, 72% (43 of the 60) noted that their sustainability initiatives had positive impact on their employee satisfaction. Most of these interviewees noted that through implementing initiatives such as workplace safety initiatives, employee assistance programmes, flexible working scheme and stress reduction programmes had enhanced their employee satisfaction level. From the above results it is clear that sustainability initiatives had high positive impact on employees moral. For example, organisations' policies on health and safety not only affect their costs directly but also impact on other stakeholders in different ways, for example through their effects on the risk of damage to the health of employees and local communities, on potential healthcare expenditures and through their impact on corporate reputation.

It has been argued that there is a positive relationship between firm performance (usually measured by quality and efficiency) and key human resource practices (Rodwell, et al., 2000). More specifically, the human resource practices of employee well-being, incentive pay, employee training and development, recruitment and selection, compensation, industrial relations, and performance appraisals have been identified as best practices that are positively correlated to lower employee turnover, greater employee productivity and better overall firm performance (Huselid, 1995).

In this chapter, section 7.3 has discussed three key positive impact sustainability initiatives on organisational competitiveness. Therefore section 7.3 addressed the fifth research objective of the current study.

7.4 SUMMARY

Section 7.2 has discussed the key challenges the Abu Dhabi public sector organisation face in implementing sustainability initiatives. Five challenges the Abu Dhabi public sector organisation face in implementing sustainability initiatives. The challenges are: leadership skills, cost of implementing sustainability initiatives, inflexibility, lack of knowledge, and difficulty in creating a culture of sustainability.

Overall, the following inferences and implications could be documented:

- Leadership skills, cost of implementing sustainability initiatives, inflexibility, lack of knowledge, and difficulty in creating a culture of sustainability are key ingredients for successful deployment of sustainability initiatives.
- The lack of leadership skills for successful deployment of sustainability initiatives is one of the most important challenges for organisation. Therefore, there is an urgent need to develop and deliver a bespoke training framework to address, improve and measure the effectiveness of leadership skills for driving change towards sustainability.
- To address sustainability issues, knowledge is increasingly being accessed and shared across departments and national boundaries. Cross boundary knowledge transactions also apply to boundaries within organisations, between functional specialism's and between disciplines. Therefore, managing knowledge related to sustainability is essential for successful implementation of sustainability initiatives.

The section 7.2 of the Chapter 7 has addressed the fourth research objective of the current study, which is “to critically appraise and document the main challenges the Abu Dhabi public sector organisation face in implementing sustainability initiatives”; and research questions four, which is “what key challenges do Abu Dhabi public sector organisation face in implementing sustainability initiatives” of this current study.

Section 7.3 has discussed the positive impact of sustainability initiatives on Abu Dhabi public sector organisation competitiveness. Three key positive impact the Abu Dhabi public sector organisation is experiencing through sustainability initiatives. They are: improved reputation, improved cost savings, and improved employee satisfaction.

A profound transformation of our economies and societies is imperative to meet the needs of the rapidly growing global population (UNDP, 2013). Current patterns of consumption and production risk breaching planetary boundaries. Inequitable growth and increasing volatility due to economic crises, social unrest and natural disasters also threaten sustainable development. Without a paradigm shift in how natural resources are valued and managed, inequality and instability will deepen, and human development in current and future generations will be halted, perhaps even reversed. Therefore, it is

very important environment and societal development is central to the Abu Dhabi public sector organisation mission.

The current study revealed that perceived degree of positive impact of sustainability initiatives have very high impact on organisational reputation. This is followed by improved cost savings and improved employee satisfaction. Benefits of implementing sustainability initiatives include: improved image and reputation, which are higher in organisations that are socially and environmentally responsible (Jenkins, 2006). Also, implementation of sustainability initiatives may help the organisation to reduce its operational costs, due the application of environmental measures which help reduce cost, such as the application of solar panels as renewable energy helps the environment by lowering carbon emission, but helps reduce energy bills to the company (Tsoutsoura, 2004).

Sustainability initiatives could result in monetary as well non-monetary benefits that can influence an organisation's competitiveness. Monetary benefits include cost decreases, risk reduction, and increases in reputation. While equally important to monetary impacts, improved stakeholder relations are often not measurable in quantitative terms. Non- monetary qualitative benefits can also lead to monetary benefits in the future so that interrelations between the individual fields in the model exist. For example, the improved possibilities for capital access represent a qualitative impact if referring to improved relations to investors without actual capital provisions. If eventually leading to new capital this benefit can lead to cost decreases (e.g., financing costs) reflected as a monetary benefit in the model.

Non-monetary benefits that can also be measured using quantitative indicators include further effects on customer attraction and retention, reputation, and employee recruitment, motivation and retention. Although these benefits can also be assessed qualitatively, quantitative indicators can be measured such as repurchase rates, reputation indices, or fluctuation rates so that these benefits are classified here as non-monetary benefits with possible quantitative indicators. These non-monetary impacts can lead to monetary benefits. For example, increased employee motivation can increase productivity and eventually result in cost savings. The same is true for effects on employee recruitment or retention, which can lead to reduced personnel marketing costs. These further effects are included as monetary cost savings in the model.

However, as such effects are often difficult to measure in monetary terms and occur with a time lag, these effects are also included as non-monetary benefits in the model to ensure adequate monitoring.

Overall, the following inferences and implications can be drawn:

- It is seen from this study that the Abu Dhabi public sector organisation is enhancing its competitiveness by the implementation of sustainability strategies. However, depending on how organisations embed sustainability strategies and combat the barriers faced for implementation, will influence how their organisational competitiveness improves. Therefore, it can be foreseen that as organisations are implementing the same initiatives, the way which they experience competitive advantage will depend on the sustainability strategy that is undertaken.
- To move toward a more advanced stage of sustainability integration and improve the decision-making process, the drivers of sustainability and the linkages between them must be analysed. A clear set of impacts that are caused by organisational activities and an understanding of these impacts on different stakeholders will also aid managerial decisions.
- The study has concluded that sustainability initiatives have great potential towards competitive advantage will get to the stage where it is no longer an advantage but rather necessary just to remain competitive. The speed at which sustainability initiatives spreads will be dependent on how quick potential competitive advantage is extrapolated from the initiatives put in place. Ultimately the concepts of sustainability and competitive advantage are highly compatible with each other where the extent of the benefits is determined by the organisations commitment and priority towards the efficient practices.
- The study further concludes that the upscaling of local and community work activities is one of the promising avenues of work for the future. Going forward will increase Abu Dhabi public sector organisation work with local communities to ensure that their voices are heard and their rights are respected in the development process.

Section 7.3 of the Chapter 7 has addressed the fifth research objective, which is “to critically appraise and document the extent to which key sustainability initiatives contribute to competitiveness of Abu Dhabi public sector organisation, which is “what impact does effective implementation of sustainability initiatives have on Abu Dhabi public sector organisation competitiveness”, The next Chapter (Chapter 8) will discuss a strategic framework for managing transformational change towards sustainability for the benefit of Abu Dhabi public sector organisation.

CHAPTER 8 : A STRATEGIC FRAMEWORK FOR MANAGING TRANSFORMATIONAL CHANGE TOWARDS SUSTAINABILITY

8.1 INTRODUCTION

This chapter presents a strategic framework for managing transformational change towards sustainability. The findings from the previous stages of this research study were taken into consideration in the development of the framework. The developed strategic framework uses the environmental, social and economic dimensions of sustainability as its foundation. The strategic framework integrates sustainability initiatives and change management initiatives. The developed framework provides broad guidance for the integration of sustainability initiatives into day-to-day operational decisions. Section 8.2 discusses the rationale for the framework. Section 8.3 discusses the proposed framework. While section 8.4 summaries the key benefits of the framework.

This strategic framework is intended to offer guidance for the successful implementation of sustainability initiatives to simultaneously improve environmental, social and economic performance. In doing so, chapter 8 addresses the sixth research objective of this current study, which is “to develop a strategic framework for managing transformational change towards sustainability”.

8.2 RATIONALE FOR A FRAMEWORK FOR MANAGING TRANSFORMATIONAL CHANGE TOWARDS SUSTAINABILITY

According to Dean and Clarke (2003), a framework acts as the under-pinning of a general theory. When there is an absence of theory, a framework is useful in organising a particular subject, by identifying the connections between various component parts and recognising areas where further development is required (Sprague, 1980). Furthermore, a framework is useful for theory generation as they assist in organising inquiry. However, Augenbroe et al. (1998) acknowledge that the framework ignores what they state as the ‘real problem’. According to them this lies on the transition or boundaries between different system levels, actors and life cycle stages. They further stress the lack of support for integral comparison of different alternatives. When the effectiveness of implementing sustainability initiatives is considered, it is important to see how well the stakeholders involved in a particular process phase, interact to deliver

sustainability requirements at different system boundaries. Augenbroe et al. (1998) advocate transparency across system boundaries at different system levels, as a solution for lack of co-ordination, which has been identified as a root cause for past problems.

Beer and Nohria (2000) noted that one of the key reasons for failure of any change initiatives is due to lack of an integrated framework for understanding change. Therefore, it requires a framework that allows executives to identify emerging sustainability issues, assess the impact of the company's ties on all its key stakeholders, measure the business value of relevant sustainability initiatives, and capture that value. The emergent framework of the sustainability initiatives implementation process brought to light the interconnected nature between the activities within the process phases and the influence factors that affect the success of these activities. The lack of attention given to fulfilling all the activities within the phases and effectively managing the influence factors was observed to bring about poor or sub-par levels of achievements in terms of sustainability objectives.

In this study, during face-to-face interviews, interviewees were asked the need for a strategic framework for managing transformational change towards sustainability. Of the interviewees, 90% (54 of the 60) of the interviewees cited the need for a holistic, comprehensive framework for addressing the issues relating to both the uptake and implementation of sustainability initiatives. Many interviewees noted that their executives are familiar with managing traditional financial values, whether in terms of economic value added or other measures driving share price performance. However, their executives are less knowledgeable about developing, deploying, managing and measuring social and environmental issues and values.

Considering the above discussions, it is clear that there exists a need for developing a holistic, comprehensive strategic framework for managing transformational change towards sustainability. Such a framework should be clear and easily understood by a variety of stakeholders with diverse backgrounds, who are involved in the different phases of the implementation process. The framework should also have a means of aligning and integrating the organisation level objectives and actions.

8.3 PROPOSED FRAMEWORK FOR MANAGING TRANSFORMATIONAL CHANGE TOWARDS SUSTAINABILITY

This section presents the proposed strategic framework for managing transformational change towards sustainability (see Figure 8.1). The framework consists of three stages: inputs, processes and outputs. The inputs of the framework include the key drivers for implementing sustainability initiatives. These inputs guide the decisions of managers and the processes that the organisation undertakes to improve its sustainability performance. After evaluating the inputs and likely effects on sustainability performance, managers can develop the appropriate processes to address sustainability initiatives. The policy, structure, reward systems, training programmes, sustainability-related activities and performance reporting are key success factors for successful implementation of sustainability initiatives. The effective implementation of sustainability initiatives can lead to improved environmental, social and economic performance ultimately affecting long-term environmental, social and economic value. Also, included in the framework are continual feedback loops that decision makers can use to evaluate and improve organisation sustainability strategy. Discussions on each of these processes are provided within the following sections of this chapter.

Table 8.1: The key driver for implementing sustainability initiatives

Driver for implementing sustainability initiatives	Level of Importance		
	Very important	Important	Not at all important
To ensure employees' health and safety			
To enhance reputation			
Leadership commitment to sustainability			
Stakeholders' requirement			
Government regulation			
Effectively addressing regulatory restrictions			
To enhance innovation			
To attract and retain diverse top talent			
To increase productivity			
To reduce operating costs			

INPUTS

Inputs are considered as drivers for implementing sustainability initiatives. Table 8.1 shows some of the key drivers for implementing sustainability initiatives. The inputs of the framework include the external drivers (e.g. Government regulation/legislation) and internal drivers (e.g. leadership commitment for sustainable development). This is perceived to be important for four reasons. Firstly, understanding the drivers as an input could help leaders to identify the resulting sustainability-related drivers in their organisation. Secondly, this could act as a much-needed catalyst for stimulating internal discussion and debate about sustainability issues threats and opportunities in the market and society. Thirdly, it should assist decision makers to develop sustainability strategy based on the drivers. Finally, this could expose the mechanisms that foster sustainable organisations, allowing managers and decision makers to determine the relative efficacy of actions, market measures, and voluntary measures (Bansal and Roth, 2000; Grayson and Hodges, 2004).

The current study revealed that complex mix of forces drives organisations to implement sustainability initiatives. They are: to enhance reputation, reducing operating costs, leadership commitment, stakeholders' pressure, and Government regulation. (see Chapter 5, Section 5.3). It should be noted that for some organisations the key drivers may be all or a combination of some of these drivers.

• PROCESSES

This is the second stage of the framework. This stage consists of four sub-processes. They are: understanding the concept of sustainability, identifying and implementing key sustainability initiatives, key change management initiatives for dealing with sustainability initiatives and key initiatives related to managing knowledge associated with sustainability initiatives.

Understanding the concept of sustainability: The concept of sustainability is sometimes confused with other terms that are widely used today. The current study results revealed that there are many misconceptions of what sustainability represents to the Abu Dhabi public sector organisation (see Chapter 5). Such misunderstanding and contradictory interpretations associated with them usually translated into a negative

view, which in turn usually reflects an organisation's willingness to implement sustainability initiatives or reject the very basic idea of sustainability. It is clear from the current study results that the concept of sustainability is most often geared towards environmental dimension. This is followed by social and economic dimension. To improve sustainability performance, executives have to recognise and better understand the concept of sustainability. To address the sustainability issues, triple bottom line concept offers business leaders a twenty-first century management framework.

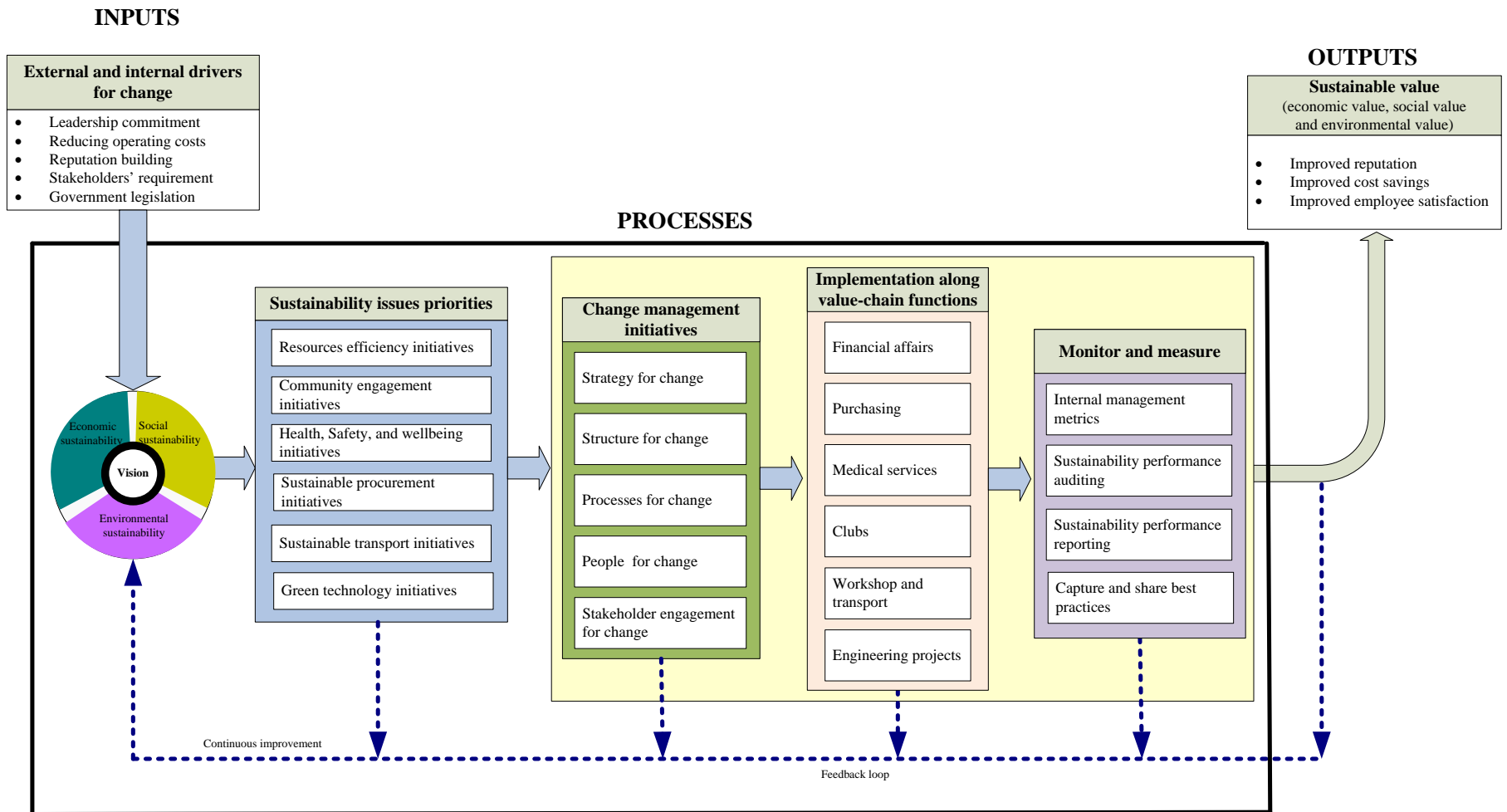


Figure 8.1: A strategic framework for managing transformational change towards sustainability

Identifying and implementing key sustainability initiatives: After evaluating the key drivers and their likely effects on environmental, social and economic value, organisations need to develop appropriate strategies to implement sustainability initiatives. Therefore, organisations should identify what key sustainability issues are important to their businesses. To determine which issues need attention, decision makers use clues to place issues in cognitive categories. These linguistic labels help the decision maker interpret the issue because of their pre-assigned attributes, and shape organisational actions.

In this study, ten key sustainability initiatives have been widely implemented. They are: Health, safety and wellbeing initiatives, community engagement initiatives, resources efficiency initiatives, sustainable procurement initiatives, sustainable transport initiatives, change management initiatives for dealing with sustainability initiatives, embedded culture for sustainability, specialised knowledge creation, and incentive system to promote sustainability initiatives (See Table 8.2, 8.3, and 8.4). The assessment variables were derived from literature review and interviews.

Table 8.2: Assessment of community engagement initiatives

SL. No	Variables	Score				
		None	A little	Adequate	Substantial	A great deal
	Community engagement programmes					
	The extent to which the department is involved in community engagement in the area of sustainability					
	The level of commitment of the department's resources in sustainability projects in the community					
	The degree to which local sustainability issues and challenges form part of the department's community engagement					
	The extent to which the department collaborates with other stakeholders in addressing community sustainability challenges					
	The extent to which aspects of sustainable development are used in selection/execution of community engagement projects					
	The extent to which social aspects are assessed/examined					
	The extent to which social aspects are considered in evaluating/assessing projects					
	The level of expertise of employees in the area of community engagement					
	Education, training, counselling, prevention, and risk control programs in place to assist workforce members, their families, or community members regarding serious diseases					

Table 8.3: Assessment of resources efficiency initiatives

SL. No	Variables	Score				
		None	A little	Adequate	Substantial	A great deal
	Resources efficiency practices					
	Recycling of solid waste (including paper, plastic, metal, etc.)					
	Source reduction of toxic materials and radioactive waste					
	CO2 and air pollution reduction practices (including alternative fuel use, renewable energy sources, emission control devices, etc.)					
	Indoor air quality standards and practices					
	Building construction and renovation based on sustainability design principles					
	Energy conservation practices					
	Purchasing from environmentally and socially responsible companies					
	Sustainable transportation programme (including bicycle/pedestrian friendly systems, car pools, bus pass programmes, electric/natural gas campus vehicles)					
	Use of solar power					
	Water conservation practices					
	Sustainable landscaping (emphasizing native plants, biodiversity, minimising lawn, etc.)					
	Materials used by weight or volume					
	Materials used that are recycled input materials					
	Direct energy consumption by primary energy source					
	Indirect energy consumption by primary source					
	Energy saved due to conservation and efficiency improvements					
	Initiatives to provide energy efficient or renewable energy based products					
	Initiatives to reduce indirect energy consumption					
	% and total volume of water recycled and reused					
	Total weight of waste by type and disposal method					
	Total direct and indirect greenhouse gas emissions by weight					
	Initiatives to reduce greenhouse gas emissions and reductions achieved					

Table 8.4: Assessment of Health and Safety initiatives

SL. No	Variables	Score				
		None	A little	Adequate	Substantial	A great deal
	Health and Safety programmes					
	Percentage of total workforce represented in formal joint management-worker H&S committees that help monitor and advise on occupational H&S programs					
	Rates of injury, occupational diseases, lost days and absenteeism, and number of work related fatalities					
	Average hours of H&S training per year per employee by employee category					
	Health and safety topics covered in formal training programmes					
	Life cycle stages in which H & S impacts of products and services are assessed for improvement, and % of significant products and services categories subject to such procedures					

Sustainability issues are complex, dynamic, and multifaceted. Hence, organisations need to make continuous assessment of their social, environmental, and economic impacts to see where critical pressure is most likely to come and how well and how quickly organisations respond to changing critical sustainability-related drivers for growth (see Table 8.5, 8.6 and 8.7).

It is critical to collect and analyse information on sustainability initiatives for improved resources allocation decisions. Reporting on sustainability activities and performance is an opportunity for organisations to tell the story of its sustainability achievements to the wider stakeholders.

Sustainability activities must begin with the commitment of top management. However, having the leadership commitment is critical. An organisation sustainability mission statement should be adopted to convey the leadership commitment throughout the organisation. Then organisations sustainability strategies such as policies and procedures, structures, reward systems, training programmes and performance reporting system are need to be developed to move the company toward a full integration of sustainability initiatives. Such a move must be seen as a core corporate value, central to company operations, rather than as a reaction to current or pending government regulations/legislations.

To assess organisational readiness to meet major challenges encountered in the journey to sustainable organisation: meeting today's needs without compromising the ability of future generations to meet their own needs. Best-practice organisations define success in terms of an integrated triple bottom line: accountability for social equity, ecological integrity, and financial profitability.

To assess any organisation's readiness to transformation change towards sustainability, simply rate the following 12 statements on a scale from 1 to 5, where:

1 = not characteristic; this never happens here

2 = somewhat characteristic; this seldom happens here

3 = characteristic; this sometimes happens here

4 = very characteristic; this frequently happens here

5 = extremely characteristic; this always happens here

1. ☐ Senior leaders visibly support and communicate benefits of sustainability practises
2. ☐ People here appreciate how embracing sustainable development values will impact our organisation and jobs
3. ☐ People here agree about what does and does not need to change as we move towards sustainable organisation
4. ☐ People here understand the scope and time requirement for becoming a sustainable organisation
5. ☐ Managers typically recognise and address individual resistance to adopting sustainability practices
6. ☐ Management recognise and rewards those individual and supporting the change to sustainable organisation
7. ☐ People here respect and value those working to create a sustainable organisation culture
8. ☐ Employees get time and support for learning new skills essential for future success
9. ☐ Managers rebalance job responsibilities of people assigned to change projects
10. ☐ Goals of sustainable organisation efforts are aligned across organisation departments
11. ☐ People here are willing to share information and ideas to achieve the best results

12. [] We have high levels of trust and cooperation between management and employees

Calculate the score: total the 12 numbers assigned to each statement. If the score equals:

- 55-60: Change master-primed and ready to handle major challenges
- 46-54: Change leader-likely to cope with challenges, with some bumps in the road
- 36-45: Change dilettante-proceed with caution; high risk of unrealised benefits
- <36: Change novice-need guidance from organisational change masters

For example if every statement is assigned at 5, then the total score would be 12 times 5 that equals to 60.

Table 8.5: Assessment of organisational vision and mission assessment

SL. No	Variables	Score				
		None	A little	Adequate	Substantial	A great deal
	Organisation vision and mission					
	Existence of sustainability/sustainability related policies at the organisation					
	Integration of sustainability issues in organisational policies					
	Integration of aspects of sustainable development in organisation vision and mission statement					
	Reflection of local sustainability challenges in policies and written statements					
	The degree to which policies and written statements reflect national and global sustainability issues					
	Implementation of policies of sustainability/sustainability related policies					
	Plans to improve sustainability focus in the next policy review cycle					

Table 8.6: Assessment of organisational structure and reward systems assessment

SL. No	Variables	Score				
		None	A little	Adequate	Substantial	A great deal
	Organisation structure and reward system					
	The presence of a body responsible for sustainable development at the organisation					
	Consideration of aspects of sustainability in staff hiring decisions					
	Consideration of aspects of sustainable development in orientation programmes for new staff members					
	Staff development in sustainable development					
	Staff rewards for sustainable development related activities					
	Consideration of aspects of sustainable development in organisational planning					
	Allocation of funds for sustainability projects					
	Awareness raising in sustainable development					
	Visibility of sustainable development through celebration of environmental days					
	Career counselling focused on work opportunities related to environment and sustainability					
	Voluntary community service by staff related to sustainability issues and concerns					

Table 8.7: Assessment of organisational training and education assessment

SL. No	Variables	Score				
		None	A little	Adequate	Substantial	A great deal
	Training and education					
	The extent to which the department offer training courses that engage sustainability concerns					
	The level of integration of sustainability topics in training courses referred to above					
	The degree to which local sustainability issues and challenges form part of the department's training programme					
	The degree to which global sustainability issues and challenges form part of the department's training programme					
	The extent to which the department enrol staff in training courses that engage sustainability concerns					
	The level of cross department collaboration in training sustainability programmes					
	The capacity to make informed decisions related to sustainability					
	Critical thinking skills for sustainability decision making					
	Integrated problem solving skills					

The current study findings do suggests that leadership skills, cost of implementing sustainability initiatives, inflexibility, lack of knowledge, and difficulty in creating a culture of sustainability are key factors for successful implementation of sustainability initiatives.

To improve organisational sustainability performance, executives have to recognise and better understand the key knowledge assets associated with sustainability initiatives available within and across organisations. Hunt (2003) suggests that knowledge map may provide a possible answer to the challenges of how to locate new forms of useful knowledge, and the flow of knowledge within and across organisations, including new directions for training employees, stimulating and facilitating knowledge sharing, and establishing useful links with external stakeholders.

- **OUTPUTS**

This is the third and final stage of the proposed framework. The outputs are in the form of competitiveness variables. Sustainability initiatives can enhance competitiveness in several ways (see Table 8.8, 8.9 and 8.10). For most organisations, the ultimate focus of sustainability strategies and programmes must be long-term performance. This study results shows that effective implementation of sustainability initiatives have positive impact on improved reputation, improved cost savings, and improved employee satisfaction. The Abu Dhabi public sector organisation is reducing their environmental footprint through reduced resources consumption and carbon emissions level. Community related initiatives undertaken by organisation are also improving employee satisfaction level. Through implementing various health, safety and well-being initiatives, organisations are able to reduce costs through reduced absenteeism, lateness, worker turnover, loss of productivity, and healthcare costs (see Chapter 7). Therefore, the current study results clearly suggest that organisations are creating environmental, social and economic values thorough effective implementation of sustainability initiatives.

Table 8.8: Sustainable value creation – Greenhouse gas emissions

Greenhouse gas emissions	Performance indicators	Actual results	Targeted results	Deficit
Non-Financial indicator tCo2E 000's	• Total gross emissions for scopes 1,2, &3			
	• Total net emissions for scopes 1,2, &3			
	• Total gross emissions for scopes 1			
	• Total gross emissions for scopes 2 &3			
Related energy consumption KWh 000's	• Electricity: Non-renewable			
	• Electricity: Renewable			
	• Gas			
	• LPG			
Related equipment energy consumption Litre 000's	• Other			
	• Aviation travel fuel			
	• Diesel (retail blend and mineral blend)			
	• Diesel (retail blend)			
	• Diesel (100% mineral)			
	• Gas oil			
Financial indicators (AED)	• Petrol			
	• Expenditure on energy			
	• Expenditure on official business travel			
Normalisation	• Expenditure on equipment energy (fuel)			
	Total scopes 1,2, &3 – tCo2-e 000's			
	• Total department spend			
	• Normalisation – scope 1 &2 emissions '000/ budget '000			

Table 8.9: Sustainable value creation – water consumption

Finite resources consumption – water	Performance indicators	Actual results	Targeted results	Deficit
Non-Financial indicator M ³ 000's	• Water consumption (office estates)			
	• Water consumption (workshop)			
	• Water consumption (non-office and workshop)			
Financial indicators (AED)	• Water supply costs			
	• Total department spend on water supply			

Table 8.10: Sustainable value creation – waste reduction

Waste	Performance indicators	Actual results	Targeted results	Deficit
Non-Financial indicator M ³ 000's	• Total waste			
	• Hazardous waste			
	• Non-hazardous waste	• Landfill		
		• Reused/recycled		
		• Composted		
		• Incineration with energy recovery		
		• Incinerated without energy		
Financial indicators (AED)	• Total disposal cost			
	• Department total			

8.4 VALIDATION OF THE FRAMEWORK

The proposed framework was ‘validated’ using qualitative interviews during the final stage of the research. Herein, the term ‘validation’ is not used in the positivist sense; i.e. to refer to ‘nothing less than the truth’ known through ‘language referring to a stable social reality’ (Seale, 1999). Rather the term is used to encapsulate some of the criteria put forward by Corbin and Strauss (2008) to evaluate the ‘quality’ of research findings derived using the principles of grounded theory. These criteria are;

- ‘Fit’ (i.e. ensuring that the findings ‘resonate’ with the experience of the professionals for whom they are intended).
- ‘Applicability’ (i.e. establishing the usefulness of findings).
- ‘Logic’ (i.e. ensuring that there is a logical flow of ideas, making sure that there are no significant gaps in logic).
- ‘Depth’ (i.e. ensuring that there is sufficient substance within the findings)

As stated in chapter 4 (section 4.10), in this study, the developed framework was validated with 12 senior professionals, who had over 20 years of work experience in the organisation.

In this study, during face-to-face interview, the interviewees were asked about the comprehensiveness of the developed framework. Most of the interviewees agreed that there is a very high level of coverage in terms of the constituent sections of the developed framework. There was further agreement amongst interviewees that there was a high level of coverage in terms of the contents provided within each section. However, one interviewee mentioned that the framework could be further improved through the incorporation of performance measures within processes, which would in turn improve its applicability in practice. The interviewees also felt that the flow and the logic of the framework were easy to understand and clear, indicating a high level of logic. Overall, the interviewees felt the framework presented a useful tool for implementing sustainability strategies; providing greater understanding and awareness on sustainability issues and guiding actions for implementing sustainability practices. For instance, one of the interviewees noted that:

“It looks very comprehensive, because it goes into details in each section. I’m sure it will be useful to the public sector organisation to implement sustainability strategies, because now it’s becoming more and more of a requirement... I think it will

be useful to the UAE public sector organisations to understand more, what sustainable development is about”.

Furthermore, the interviewees were asked if they recommend the framework for use by other public sector organisation, response from all interviewees was very positive. They considered a framework will help their organisations to identify key drivers, key sustainability strategies, and benefits of implementing sustainability initiatives. Overall, most of the interviewees recommended that the developed framework can be used for managing transformational change towards sustainability. The framework can be further tested and revised in both academic and business context. Overall, framework and its validation attempted to address objective six of this research study.

8.5 SUMMARY

This chapter has discussed the development of a strategic framework for managing transformational change towards sustainability. It can aid managers in operationalising a sustainability strategy and tying it to the specific actions that will improve competitiveness. The findings from the previous stages of the research study and aspects from critical review of literature were taken into consideration in the development of the framework. The developed framework consists of 3 stages: inputs, processes and outputs. The developed and validated framework provides broader idea for the integration of sustainability initiatives into day-to-day management decisions.

The framework can help managers to systematically think through drivers for implementing sustainability initiatives, the concept of sustainability, sustainability initiatives. In addition, a developed framework also shows the benefits of implementing sustainability initiatives. In doing so, this chapter addressed objective sixth of the current study, which is “to develop and validate a strategic framework for managing transformational change towards sustainability”.

CHAPTER 9 : CONCLUSIONS AND RECOMMENDATIONS

9.1 INTRODUCTION

This chapter discusses the aim, objectives and research questions of the study. In doing so, it presents the finding and also provides conclusions and recommendations. The key findings are discussed with respect to the objectives of the study. Prior to that, the research process is discussed.

9.2 RESEARCH PROCESS

The overall aim of this research is to investigate the key sustainability initiatives currently being implemented in the Abu Dhabi public sector organisations so as to improve their competitiveness.

In order to achieve this aim the following objectives were identified.

1. To investigate and document the perceptions of Abu Dhabi public sector organisations on the concept of sustainability.
2. To explore and document the key drivers for implementing sustainability initiatives (environmental, social and economic) in Abu Dhabi public sector organisations.
3. To investigate and document the key sustainability initiatives needed to effect change that are currently being implemented in Abu Dhabi public sector organisations.
4. To critically appraise and document the main challenges associated with implementing key sustainability initiatives needed to effect change in Abu Dhabi public sector organisations.
5. To critically appraise and document the extent to which key sustainability initiatives contributes to competitiveness.
6. To develop and validate a strategic framework for managing transformational change towards sustainability.

The qualitative research approach was adopted to collect and analyse data from 60 professionals. The participants for the interview are 20 interviews at the director level, 20 interviews at the manager level and 20 at the operational level. Interviews were audio recorded and then transcribed. As part of the analysis of the interviews, content analysis was employed.

9.3 KEY FINDINGS AND CONCLUSIONS

Objective 1: To investigate and document the perceptions of Abu Dhabi public sector organisations on the concept of sustainability.

Research question 1: What does sustainability mean to Abu Dhabi public sector organisations?

This study revealed that, the concept of sustainability falls broadly into three key categories. They are: environmental sustainability dimension, social sustainability dimension and economic sustainability dimension. From this study, it is apparent that the environmental sustainability dimension predominates compares to social and economic dimensions of sustainability. There is no uniform understanding of the concept of sustainability within the Abu Dhabi public sector organisation. The concept continuously keeps on developing theoretically and methodologically. Given the current context, it seems unlikely that a coherent, universal conceptual approach to the concept of sustainability will emerge in the near future. However, while this conceptual development takes place the principles of sustainability continues to be implemented at various levels.

It is concluded that, although the importance of sustainability is broadly acknowledged within the Abu Dhabi public sector organisation, there is a significant lack of a common and operationalised understanding on the concept of sustainability. It is worthwhile to consider a holistic view of sustainability rather in isolation. The economic, social and environmental sustainability dimension elements show a nature of interdependence between them. Therefore, an organisation wide awareness-raising programme on the concept of sustainability needs to be developed and deployed. The existing education and training programmes need some reorientation.

Objective 2: To explore and document the key drivers for implementing sustainability initiatives (environmental, social and economic) in Abu Dhabi public sector organisations.

Research question 2: What are the key drivers that have fuelled the need for implementing sustainability initiatives in Abu Dhabi public sector organisations?

A complex mix of political, economic, social and environmental forces drives the Abu Dhabi public sector organisation to implement sustainability initiatives. Five key drivers have fuelled the need for implementing sustainability initiatives. They are: reputation building; reducing operating costs; leadership commitment; stakeholders' requirement; and Government regulation. It is concluded that before organisations embed sustainability initiatives they need to understand and recognise key drivers, which are pushing them towards implementation. Therefore, understanding the drivers for implementing sustainability initiatives is important. It is apparent that if public sector organisations do not implement and practice sustainability initiatives will pay for it in the long-term and maybe even in the relatively short-term, too.

Objective 3: To investigate and document the key sustainability initiatives needed to effect change that are currently being implemented in Abu Dhabi public sector organisations.

Research question 3: What are the key sustainability initiatives currently being implemented in Abu Dhabi public sector organisations needed to effect change?

In this study, ten key sustainability initiatives that have been implemented in the Abu Dhabi public sector organisation. In the order of implementation, they are: Health, safety and wellbeing initiatives, community engagement initiatives, resources efficiency initiatives, sustainable procurement initiatives, sustainable transport initiatives, change management initiatives for dealing with sustainability initiatives, green technology, embedded culture for sustainability, specialised knowledge creation, and incentive system to promote sustainability initiatives. It is concluded that the overall outlook for improved sustainability initiatives efforts from the Abu Dhabi public sector organisation looks quite promising at present. This is because organisations those implement sustainability initiatives will benefit from improved reputation, better employee engagement, lower operating costs, and better relationship with key stakeholders. Clear and strong brand, should improve the public perception of the quality of services that public sector offers, and this in turn, will increase the trust, loyalty and will help reducing the perceived risk. Furthermore, it is recommend that sustainability issues are

complex, dynamic, and multifaceted. Therefore, it is essential to continue the process of monitoring and identifying emerging sustainability issues and solutions.

Objective 4: To critically appraise and document the main challenges associated with implementing key sustainability initiatives needed to effect change in Abu Dhabi public sector organisations.

Research question 4: What key challenges do Abu Dhabi public sector organisations face in implementing sustainability initiatives?

This study revealed five key challenges the Abu Dhabi public sector organisation face in implementing sustainability initiatives. They are: leadership skills for implementing sustainability initiatives, cost of implementing sustainability initiatives, inflexibility, lack of knowledge, and difficulty in creating a culture of sustainability. The lack of leadership skills for successful deployment of sustainability initiatives is one of the most important challenges for organisation. Therefore, it is recommended that there is an urgent need to develop and deliver a bespoke training framework to address, improve and measure the effectiveness of leadership skills for driving change towards sustainability. Findings do suggests that strong leadership, business case for sustainability, flexibility, the level of sustainability-related knowledge, and creating a culture for change are key ingredients for successful deployment of sustainability initiatives.

Objective 5: To critically appraise and document the extent to which key sustainability initiatives contributes to competitiveness.

Research question 5: What impact does effective implementation of sustainability initiatives have on competitiveness?

The current study revealed that perceived degree of positive impact of sustainability initiatives have very high impact on organisational reputation. This is followed by improved cost savings and improved employee satisfaction. It is concluded from this study that the Abu Dhabi public sector organisation is enhancing its competitiveness by the implementation of sustainability strategies. To move toward a more advanced stage of sustainability integration and improve the decision-making process, the drivers of sustainability and the linkages between them must be analysed. A clear set of impacts that are caused by organisational activities and an understanding of these impacts on different stakeholders will also aid managerial decisions.

The study further concludes that the upscaling of local and community work activities is one of the promising avenues of work for the future. Going forward will increase Abu Dhabi public sector organisation work with local communities to ensure that their voices are heard and their rights are respected in the development process.

Objective 6: To develop and validate a strategic framework for managing transformational change towards sustainability.

A strategic framework for managing transformational change towards sustainability was developed and validated. It can aid managers in operationalising a sustainability strategy and tying it to the specific actions that will improve environmental, social and economic value. The developed framework provides broad guidance for the integration of sustainability initiatives into day-to-day operational decisions. The findings from the previous stages of the research study were taken into consideration in the development of the framework. The developed framework consists of 3 stages: inputs, processes and outputs. The framework can be further tested and revised in both organisation and academic environment.

9.4 RECOMMENDATIONS

Recommendations for decision makers

- The Abu Dhabi government has made public commitments to transform along a more sustainable trajectory and assigned the public sector the collective responsibility of leading this transformation. Therefore, public sector organisations are being encouraged to operate sustainably, to reduce their environmental footprint and improve social responsibility. This in turn would stimulate sustainability performance in the public sector. Therefore, public sector organisations have to embrace sustainable practices, re-orient their activities to achieve wider societal sustainable outcomes and govern others to act more sustainably.
- The concept of sustainability is perceived in a distinct concept (i.e. only environmental or social or economic). It is worthwhile to consider a holistic view of sustainability rather in isolation. The economic, social and environmental sustainability dimension elements show a nature of interdependence between them. Over emphasising one dimension can negatively impact the two others. Finding smart trade-offs is, therefore, a necessity if sustainability is to be reached.

- There is a need to promote a more holistic approach to sustainability at national level, which should in turn be reflected within the organisation policy documents. This requires giving equal consideration to environmental, social and economic elements. Awareness and access should be improved on new knowledge and innovations. This could help in alleviating the perceived high risk of certain sustainability issues. Best practice examples related to sustainability, from not just within UAE, but also from other countries should be promoted.
- A complex mix of political, economic, social and environmental forces drives the Abu Dhabi public sector organisation to implement sustainability initiatives. Before organisations imbed sustainability initiatives they need to understand and recognise key drivers, which are pushing them towards implementation. Therefore, understanding the drivers for implementing sustainability initiatives is important.
- Sustainability issues are complex, dynamic, and multifaceted. Even though, the overall outlook of sustainability initiatives efforts from the Abu Dhabi public sector organisation looks quite promising at present, it is essential to continue the process of monitoring and identifying new emerging sustainability issues and solutions.
- The recent developments in mobile technologies present great opportunities for public sector organisations wishing to manage sustainability issues effectively in both the developed and the developing world. Therefore, the UAE government must develop and deploy a policy framework for successful implementation of mobile applications to minimise social, economic and environmental sustainability risks. It is essential that attention is given to capacity building on mobile applications business concepts, strategies, and processes in relation to sustainability. The education and training programmes should be dynamic and adaptable to the increasing changing needs of business, society and people at large.
- The strong leadership, business case for sustainability, flexibility, the level of sustainability-related knowledge, and creating a culture for change are key ingredients for successful deployment of sustainability initiatives.
- To address sustainability issues, knowledge is increasingly being accessed and shared across departments and national boundaries. Cross boundary knowledge

transactions also apply to boundaries within organisations, between functional specialism's and between disciplines. Therefore, managing knowledge related to sustainability is essential for successful implementation of sustainability initiatives.

Recommendations for the Abu Dhabi public sector organisation

- Although the importance of sustainability is broadly acknowledged in the Abu Dhabi public sector organisation, there is a significant lack of a common and operationalised understanding on the concept of sustainability. Therefore, an organisation wide awareness-raising training programme on the concept of sustainability needs to be developed and deployed. The existing education and training programmes need some reorientation. Continuing Professional Development (CPD) programmes and executive training programmes are valuable ways to raise sustainability awareness.
- The current study results suggest that the implementation of change management initiatives to deal with sustainability initiatives is still evolving in the Abu Dhabi public sector organisation. Taken together, the impact of leadership, sustainability-related policies, structures, reward systems, training programmes and performance reporting are key factors in successful implementation of sustainability initiatives. It is suggested that more clarity is needed on how the Abu Dhabi public sector organisation must change to meet the sustainability challenge, and how the necessary changes may be achieved. Therefore, there is a need for cross-sector collaboration to capture and share best and worst practices related to transformative change towards sustainability.
- To move toward a more advanced stage of sustainability integration and improve the decision-making process, the drivers of sustainability and the linkages between them must be analysed. A clear set of impacts that are caused by organisational activities and an understanding of these impacts on different stakeholders will also aid managerial decisions.
- The sustainability initiatives have great potential towards competitive advantage will get to the stage where it is no longer an advantage but rather necessary just to remain competitive. The speed at which sustainability initiatives spreads will be dependent on how quick potential competitive advantage is extrapolated from the

initiatives put in place. Ultimately the concepts of sustainability and competitive advantage are highly compatible with each other where the extent of the benefits is determined by the organisations commitment and priority towards the efficient practices.

- Adopting the developed a strategic framework in this study would facilitate successful implementation of sustainability initiatives in the UAE public sector organisations.

Recommendations for academics and consultants

- Green technology has enormous potential to enable Abu Dhabi public sector organisation systems and processes to be automated; to provide officers with better information; and to support them in performing more tasks and activities while remaining visible to their communities. Green technology such as tablets will enable them to spend more time out on patrol and make them more accessible to the communities they serve. It is clear that modernising technology required to police communities and meet other organisational objectives is a mammoth task. However, once implemented may provide police service organisations to remove past stigma about lack of trust between the community and police service organisations. Therefore, there is a need for developing and implementing more mobile governance initiatives in the Abu Dhabi public sector organisation. Furthermore, there is a need to develop and implement a strategic framework for implementing mobile applications at public sector organisation level. It is suggested that future research on mobile applications for sustainability should focus on user readiness aspects, as well as organisation readiness for adoption and usage patterns of mobile devices.
- The scarcity of knowledge and expertise associated with sustainability initiatives is, and will continue to be, a huge challenge for the Abu Dhabi public sector organisation. Therefore, training programmes related to the management of sustainability-related knowledge will help leaders, managers, and change agents to better understand on how to craft and implement various sustainability-related strategies for competitive advantage.

- The lack of leadership skills for successful deployment of sustainability initiatives is one of the most important challenges for organisation. Therefore, there is an urgent need to develop and deliver a bespoke training framework to address, improve and measure the effectiveness of leadership skills for driving change towards sustainability.

9.5 FUTURE WORK

This research study has revealed a number of areas for further research and development including the following areas:

- It would be worthwhile to explore the level of embeddedness of sustainability initiatives in the police forces between developed and developing countries. This should lead to a generation of benchmark data and best practices in addressing global sustainability issues.
- Extensive studies are needed to explore the causal mechanisms linking sustainability initiatives to competitiveness variables and to determine whether or not those relationships hold consistently over time. It is also important to posit the timing in the relationship, since it would be valuable to investigate and to ascertain how long it takes for the impact of sustainability initiatives on competitiveness variables to be revealed.
- The intention behind the developed strategic framework was to provide a useful aid for the Abu Dhabi public sector organisation to embed sustainability initiatives at organisation level. Therefore, developing this framework as a user friendly mobile application (e.g. dynamic sustainability dashboards) could further improve its ease of use and appeal for external stakeholders.
- Given that the research reported in this thesis is largely exploratory in nature, the results presented here are only tentative and of limited value for the purpose of generalisation. Therefore, additional research with more elaborate and better articulated designs is therefore called for, to further explore the complex issue of sustainability initiatives.

REFERENCES

- Abdulla, J., Sjebarani, R. and Thomas, B. (2008) Construction of a scale measuring the job satisfaction of public sector employees in the UAE with particular reference to the Dubai Police Force, Saudi International Innovation Conference, pp. 90-97.
- Achim, A.C. (2014) Ergo-policing. Improving safety and ergonomic requirements of human resources involved in police duties, *Procedia Social and Behavioural Sciences*, 124, pp. 20-26.
- ADPGHQ (2015) Organisational Structure, Available at: <http://www.adpolice.gov.ae/en/>
- Ageron B., Gunasekaran A. and Spalanzani A. (2012) Sustainable Supply Management: An Empirical Study, *International Journal of Production Economics*, 140 (1), 168-182.
- Al-Mebayedh, H. (2013) Climate Changes and Its Effects on the Arab Area, *Procedia APCBEE*, 5, pp. 1-5.
- Al-Rifia, S. (2014) State of Energy Report, Dubai, UAE.
- Alvesson, M. And Sveningsson, S. (2003) Managers Doing Leadership: the extra organisation of the mundane, *Human Relations*, 56(12): 1435- 59.
- Amasuomo, E., Hasnain, S.A. and Osanyinlusi, A.Y. (2015) Sustainable Development in the Context of Major Infrastructure Projects in United Kingdom, *Journal of Geoscience and Environment Protection*, 3, pp. 44-55.
- Ambec, S., Cohen, M., Elgie, S., and Lanoie, P. (2010) The Porter hypothesis at 20: Can environmental regulation enhance, innovation and competitiveness? Chair's Paper. Conference on the Porter Hypothesis at 20, Sustainable Prosperity and Resources for the Future (RFF). Retrieved June 15, 2011, from <http://www.rff.org/documents/RFF-DP-11-01.pdf>
- Anderson, D. L., (2011) *Organization Development: The Process of Leading Organizational Change*, SAGE publication, UK.
- Ansari S., Munir K. and Gregg T. (2012) Impact at the 'Bottom of the Pyramid, The Role of Social Capital in Capability Development and Community Empowerment, *Journal of Management Studies*, 49 (4), 813-842.
- Ara, G., and Crowther, D., 2009, Making sustainable development sustainable, *Management Decision*, 47 (6), 975-988.
- Ashburner, L., Ferlie, E. and Fitzgerald, L. (1996) Organisational transformation and top down change: case of NHS, *British Journal of Management*, 1-16.
- Aspinall, S., Sertyesilisik, B., Sourani, A. and Tunstall, A. (2012) How Accurately Does Breeam Measure Sustainability? *Scientific Research*, 3, 1-8.

- Atkinson, H. (2006) Strategy implementation: A role for the balanced scorecard?, *Management Decision*, 44(10), 1441-1460.
- Authenticity Consulting (2005), *Field Guide to Consulting and Organizational Development*, Authenticity Consulting, London, UK.
- Avolio, B.J. and Bass, B.M. (2004) *Multifactor Leadership Questionnaire, Manual and Sampler set*, Mind Garden Inc, California.
- Babcock, T. and Riley, A., (2012) Driving successful transformational change through journey management, *Outlook Point of View*, 2, 1-10.
- Baker, L. S., (1989) Managing Resistance to Change, *Library Trend* , 38(1), 53-61.
- Bakker, A.B. and Heuven, E. (2006) Emotional dissonance, burnout, and in-role performance among nurses and police officers, *International Journal of Human Resource Management*, 13(3), pp. 423-440.
- Balogun, J. and Jenkins, M. (2003) Re-conceiving Change Management: A Knowledge-based Perspective, *European Management Journal*, 21 (2), 247-257.
- Bansal, P. and Roth, K. (2000) Why companies go green: A model of ecological responsiveness, *Academy of Management Journal*, 43(4), 717-736.
- Bansal, P., (2005), Evolving sustainability: A longitudinal study of corporate sustainable development, *Strategic Management Journal*, 43(4), 717-736.
- Barnett, K., McCormick, J. and Connors, R. (2001). Transformational leadership in schools panacea, placebo or problem? *Journal of Educational Administration*, 39(1), 24-46.
- Barney JB, Hesterley W. (1996) Organizational economics: understanding the relationship between organizations and economic analysis. In: Clegg SR, Hardy C, Nord WR, editors. *Handbook of organizational studies*. London: Sage, 115–47.
- Barney, J. (1991) Firm Resources and Sustained Competitive Advantage, *Journal of Management*, 17 (1), 99-120
- Barthorpe, S., (2010), Implementing corporate social responsibility in the UK construction industry, *Property Management*, 28 (1), 1-12,
- Bashir M, Afzal M. T. and Azeem M. (2009) Reliability and Validity of Qualitative and Operational Research Paradigm, *Pakistan Journal of Statistics and Operational Research*, 4(1), 35-45.
- Bass, B. M. (1985) *Leadership and performance beyond expectations*, Free Press, New York.
- Bass, B. M. (1990) *Bass and Stogdill's Handbook of Leadership: Theory, Research and Managerial Applications*, New York: Free Press.
- Baumruk R., and Gorman B. (2006) *Why managers are crucial to increasing engagement*, Melcrum Publishing, London.

- Beer, M. and Nohria, N. (2000) Cracking the change of code, Harvard business review, May-June, 133-141.
- Bell, P., Dean, G. and Gottschalk, P. (2010) Information management in law enforcement: The case of police intelligence strategy and implementation, International Journal of Information Management, 30, 343-349.
- Berkhout F. (2012) Adaptation To Climate Change By Organizations, Journal of Management Studies, 3(1), 91–106.
- Bernard H. R. (2011) Research Methods in Anthropology, Alta Mira Press, London.
- Bettley A. and Burnley S. (2008) Towards Sustainable Operations Management Integrating Sustainability Management into Operations Management Strategies and Practices. In-Book Chapter: Handbook of Performance Engineering, Misra B. Krishna (Ed), 875-904.
- Biech, E. (2007) Thriving Through Change: A Leader's Practical Guide to Change Mastery, American Society for Training and Development, New York.
- Blackler, F. (2002) Knowledge, Knowledge Work, and Organizations: An Overview and Interpretation, In Choo and Bontis (Eds.) The Strategic Management of Intellectual Capital and Organizational Knowledge, New York: Oxford University Press, 47- 64.
- Blaikie N. (1993) Approaches to Social Enquiry, Polity Press, Cambridge.
- Blake, R. and Mouton, J. (1964) The Managerial Grid: The Key to Leadership Excellence, Houston: Gulf Publishing Co.
- Blank, S. (2013) Why the Lean Start-Up Changes Everything, Harvard Business Review, May, 1-8.
- Bock A., Opsahi T., George G. and Gann D. (2012) The Effects of Culture and Structure on Strategic Flexibility during Business Model Innovation, Journal of Management Studies, 49 (2), 279–305.
- Bolden, R., Hawkins, B. and Gosling, J. (2011) Exploring Leadership: Individual, Organizational, and Societal Perspectives, Oxford University Press, Oxford.
- Boonstra, J., (2008) Dynamics of Organizational Change and Learning, John Wiley & Sons, New York.
- Boulos K., Wheeler S., Tavares C. and Jones R. (2011) How smartphones are changing the face of mobile and participatory healthcare: an overview, with example from eCAALYX, BioMedical Engineering, 10, 20-24.
- Brammer S., Jackson G. and Matten D. (2012) Corporate Social Responsibility and institutional theory: new perspectives on private governance, Socio economic Review, 10 (1), 3-28.
- Brannick, M. T. and E. L. Levine (2002) Job Analysis: Methods, Research, and Applications for Human Resource management in the New Millennium, Thousand Oaks, California, Sage.

- Brekke, K.A., and Nyborg, K., (2008), Attracting responsible employees: Green production as labor market screening, *Resource and Energy Economics*, 509-526.
- Bridges, W. (2003) *Managing Transitions: Making the Most of Change*, USA: Nicholas Brealey Publishing.
- British Transport Police (2015) *British Transport Police Fund: Statement of Accounts for the year ended 31 March 2015*, London: British Transport Police Authority.
- Brown, C. (2005) *Sustainable enterprise*, Kogan Page Limited, London, UK.
- Brundtland, G. (1987) *Our common future: The world commission on environment and development*, Oxford University Press, Oxford.
- Bruns, G.H. and Shuman, I.G. (1988) Police managers' perception of organisational leadership styles, *Public Personnel Management*, 17(2), 145-157.
- Bryant, S. E (2003) The Role of Transformational and Transactional Leadership in Creating, Sharing and Exploiting Organizational Knowledge, *Journal of Leadership & Organizational Studies*, 9, 32-44.
- Bryman Alan (2012) *Social Research Methods*, Oxford University Press, Oxford.
- Bryman Alan and Bell Emma (2011) *Business Research Methods*, Oxford University Press, Oxford.
- Burgoyne, J., Hirsh, W. and Williams, S. (2004) *The Development of Management and Leadership Capability and its Contribution to Performance: The evidence, the prospects and the research need*, Lancaster University, UK.
- Burke, W. Warner. (2002) *Organization Change: Theory and Practice*, Thousand Oaks, CA: Sage Publications.
- Burke, W. W. (2011) *Organization Change Theory and Practice*, SAGE Publications, Inc, London.
- Burke, W. W., Lake, D. G. and Paine, J. W. (2008) *Organization Change: A Comprehensive Reader*, John Wiley & Sons, New York.
- Burns N and Grove S. K. (2003) *Understanding Nursing Research*, London.
- Burns, J. M. (1978) *Leadership*, Harper & Row, New York.
- Cambridgeshire Constabulary (2011) *Cambridgeshire Constabulary Carbon Management Programme (CMP)*, Cambridgeshire: Cambridgeshire Constabulary.
- Carnall, C. (1994) *Managing Change*, London: Routledge.
- Carroll, A. B. (1979) A three-dimensional conceptual model of corporate social performance, *Academy of Management Review*, 4, 497-505.

- Carroll, A. B. and Buchholtz, K. A. (2006) Business and society - ethics and stakeholder management, South-Western Publishing Co. United States.
- Chapman Judith Ann (2002) A framework for transformational change in organisations, *Leadership & Organization Development Journal*, 23 (1), pp. 16-25.
- Chawla, A. and Kelloway, K.E. (2004). Predicting openness and commitment to change, *Leadership & Organization Development Journal*, 25 (6), 485-498.
- Chia R. (2002), The Production of Management Knowledge: Philosophical Underpinnings of Research Design, in Partington, D. (ed.) *Essential Skills for Management Research*, SAGE Publications Ltd., London, pp. 1-19.
- Chouinard Yvon, Ellison Jib and Ridgeway Rick (2011), The Big Idea: The Sustainable Economy, *The Magazine*, Harvard Business Review, January, 23-30.
- CIPD (2004) Employee absence 2004: A survey of management policy and practice, Chartered Institute of Personnel and Development, London.
- City of London Police (2015) Annual Report, London: City of London Police.
- Clegg, S. R., Harris, M. and Höpfl, H. (2011), *Managing Modernity: Beyond Bureaucracy?*. Oxford University Press.
- Coch, L. and French, J. (1948), Overcomming Ressitance to change, *Human relations*, 1, 512-513.
- Collins, E., Lawrence, S., Pavlovich, K., and Ryan, C. (2007). Business networks and the uptake of sustainability practices: the case of New Zealand, *Journal of Cleaner Production*, 729-740.
- Committee of America's Climate Choices, (2011) *America's Climate Choices*, National Research Council of the Academic Press, New York.
- Cook, S. and Yanow, D. (1995) Culture and Organizational Learnin, In Cohen and Sproull (Eds.) *Organizational Learning*, Thousand Oaks, CA: Sage Publications, 430-459.
- Cooper, C. L. (2002) *The New World of Work: Challenges and Opportunities*. Wiley-Blackwell,.
- Coyne K. P. (1986) Sustainable Competitive Advantage – What It Is and What It Isn't, *Business Horizons*, 29, 54-61.
- Curado, C. (2006), The Knowledge Based-View Of The Firm, From theoretical Origins to future implications, ISEG – Universidade Técnica de Lisboa ,Department of Management.
- D'Amato A., HendersonS. And Florence S. (2009), *Corporate Social Responsibility And Sustainable Business: A Guide to Leadership, Tasks and Functions*, Centre for Creative Leadership, Greensboro, North Carolina, CCL Press

- Daft, R. and Weick, K. (1984), Toward a Model of Organizations as Interpretation. *The Academy of Management Review*, pp. 284-295.
- Dane F. C. (2010), *Evaluating Research: Methodology for People Who Need to Read Research*, London, Sage Publications.
- Davilla A., Ramirez M. E., Jacobo and Zapata-Cantu Laura (2012), *Understanding Organizations in Complex, Emergent and Uncertain Environments*. Palgrave Macmillan.
- Davis, A. (2010) Living with Cuts to Public Services: How Can we Get More for Less. *Journal of Public Health*, 32(2), pp. 310-311.
- De March V., Di Maria E. and Micell S. (2012), Environmental Strategies, Upgrading and Competitive Advantage in Global Value Chains, *Business Strategy and the Environment*, Volume 22, Issue 1, pp. 62–72.
- De Vaus David (2001), *Research Design in Social Research*, Sage Publications.
- Delahaye, B. L. (2000). *Human Resource Development: Principles and Practices*. Brisbane, John Wiley & Sons.
- Demers, C. (2007), *Organizational Change Theories: A Synthesis..* Los Angeles: Sage.
- DeNisi, A., Hitt, M. and Jackson, S. (2003). The Knowledge-Based Approach to Sustainable Competitive Advantage. In Jackson, Hitt and DeNisi (Eds.) *Managing Knowledge for Sustained Competitive Advantage*, San Francisco: Jossey-Bass, pp. 3-33.
- Dent, E. B. (2002), Employees actually embrace change: The Chimera of Resistance. *Journal of Applied Management and Entrepreneurship* , Volume 7.
- Dent, E. B. and Goldberg, S. G. (1999), Challenging “Resistance to Change”. *Journal of Applied Behavioural Science*, Volume 35, pp. 25-41.
- Denzin K. Norman and Lincoln S. Yvonna. Edited by (1998), *Collecting and Interpreting Qualitative Materials*, Thousand Oaks, Sage.
- Department of Energy and Climate Change (2015) 2014 UK Greenhouse Gas Emissions, Provisional Figures. London: Department of Energy and Climate Change.
- Department of Environment, Food, Rural Affairs (DEFRA), (2008). *Construction Resources and Waste Roadmap*
- DeSimone, L. D. and Popoff, F. (2000) *Eco-Efficiency: The business link to sustainable development*, The MIT press, Cambridge.
- Dick, G. (2011) The influence of managerial and job variables on organisational commitment in the police. *Public Administration*, 89(2), pp. 557-576.
- Dicke, C. (2007), *Employee Engagement & Change Management*. Paris : CAHRS: Center for advanced human resource studies .

- Donnelly, E. (1987), *The Training Model: Time for a Change?*, Industrial and Commercial Training.
- Doppelt, B. (2009) *Leading change toward sustainability: A change-management guide for business, government and civil society*, Greenleaf-Publishing, Sheffield, UK.
- Doppelt, R. (2003), The seven sustainability blunders. *The Systems Thinker*, 14(5), pp. 491-492.
- Dunphy, D., Griffiths, A. and Benn, S. (2007) *Organisational change for corporate sustainability*, Routledge, London.
- Durant, M. W. (1999), *Managing Organizational Change*. Credit Research Foundation.
- Dyllick, T. and Hockerts, K. (2002) Beyond the business case for corporate sustainability, *Business Strategy and the Environment*, 11, 130–141.
- Easterby-Smith M., Thorpe R. Jackson P and Lowe A. (2008), *Management Research*, London, Sage, 3rd Ed.
- EFQM (2015) Information literacy: a definition [online]. Belgium: EFQM. [Accessed 22 November 2015]. Available at: <<http://www.efqm.org/what-we-do/sharing/good-practice-competition/police-smart-services>>.
- Environment Agency (2013) Save Water available at: <http://www.environment-agency.gov.uk/homeandleisure/beinggreen/117266.aspx>
- Eriksson P. and Kovalainen A. (2008), *Qualitative Methods in Business Research*, SAGE Publications Ltd., London.
- Evans R, Gilfedder G, Austin J (2004), Application of the biophysical capacity to change (BC2C) model to the Little River (NSW), CSIRO Land and Water Technical Report 15/04, CSIRO, Canberra
- Evans, J. P., (2009), *21st Century Climate Change in the Middle East*, Springer Science
- Fergusson, H. and Langford, D., A., (2006) Strategies for managing environmental issues in construction organizations, *Engineering Construction and Architectural Management*, 13, 2, 171-185.
- Fielder E. E. (1967), *A Theory of Leader Effectiveness*, McGraw-Hill.
- Fine S. F. (1986), Technological innovation, diffusion and resistance; a historical perspective. *Journal of library administration*, pp. 83-108.
- Flint, G.D., (2000), what is the Meaning of Competitive Advantage, *Advances in Competitiveness Research*
- Fombrun , C. J., Gardberg, N. A. and Barnett, M. L. (2000) Opportunity platforms and safety nets: Corporate citizenship and reputational risk, *Business and Society Review*, 105, 1, 85-106.

- Fombrun, C. J. and Shanley, M. (1990) What's in a name? reputation building and corporate strategy, *Academy of Management Journal*, 33, 233-258.
- Fombrun, C.J. and Van Riel, C. (2003) *Fame and Fortune: How Successful Companies Build Winning Reputations*. New Jersey: Prentice-Hall.
- Ford, J. D. and Ford, L. W. (2010), Stop Blaming Resistance to Change and Start Using It. *Organizational Dynamics*, 39(1), pp. 24-36.
- Forrier, A., Sels, L., and Stynen, D. (2009). Career mobility at the intersection between agent and structure:
- Fourth Assessment Report of the Intergovernmental Panel on Climate Change, (2007) Summary for Policymakers. Available from: <http://www.ipcc.ch/ipccreports/ar4-wg2.htm>
- Gagnon, B., Leduc, R., Savard, L., (2009), *Sustainable Development in Engineering: A Review of Principles and Definition of a Conceptual Framework*, Mary Ann Liebert, Inc., Volume 26, No.10
- Garvin, D. A. (1998). Building a learning organization. *Harvard Business Review on Knowledge Management*. Boston, MA: Harvard Business School Publishing, 47-80.
- Gellis, Z.D. (2001). Social work perceptions of transformational and transactional leadership in health care. *Social Work Research*, 25(1), pp. 17-25.
- Gibbert M. (2012), *Strategy Making in a Crisis*, Edward Elgar Publishing.
- Gill, L. and Delahaye, B. (2004), *Building Organisational Capability*, Office of Public Service Merit & Equity.
- Goehrig, R. (2008), "The role of leadership in building high performing, sustainable organizations", *Government Finance Review*, Vol. 24 No. 6, pp. 6-14.
- Golafshani Nahifd (2003), *Understanding Reliability and Validity in Qualitative Research*, The Qualitative Report, Volume 8, Number 4, pp. 597-607.
- Goldratt, E. M. (1994), *It's not luck*. North River Press.
- Goodman, P.S. and Rousseau, D.M. (2004). Organizational change that produces results: The linkage approach. *Academy of Management Executive*, 18, 3.
- Gosling, J., Bolden, R., Marturano, A. and Dennison, P. (2003), *A Review of Leadership Theory Competency Framework*, Center For Leadership Studies.
- Grant R. M. (2002), *Contemporary Strategy Analysis: Concepts, Techniques, Applications*, Blackwell, 4th Ed.
- Grant, R. (1996). Prospering in dynamically competitive environments: Organizational capability as knowledge integration. *Organization Science*, 7, 375-387.

- Grantham Research Institute (2015) Climate Change Legislation In The United Arab Emirates, An Excerpt From The 2015 Global Climate Legislation Study, A Review of Climate Change Legislation in 99 Countries. London: The London School of Economics and Political Science.
- Gray, P.C.R. and Wiedemann, P.M. (1999) Risk management and sustainable development: mutual lessons from approaches to the use of indicators. *Journal of Risk Research*, 2(3), pp. 201-218.
- Grayson, D. and Hodges, A. (2004) Corporate social opportunity: Seven steps to make corporate social responsibility work for business, Greenleaf Publications, London.
- Greenberg, J. (1994), *Organizational Behaviour: the State of the Science*. Routledge.
- Greener Sue (2008), *Business Research Methods*, Ventus Publishing Aps
- Griffin, R. W. and Moorhead, G. (2011), *Organizational Behaviour: Managing People and Organizations*. s.l.:Cengage Learning.
- Gupta, J. And N. Sanchez (2012) Global Green Governance: The Green Economy needs to be embedded in a Global Green and Equitable Rule of Law Polity, *Review of European Community and International Environmental Law*, 21(1): 12-22.
- Gupta, N.J., and Benson, C.C., (2011), Sustainability and Competitive Advantage: An Empirical Study of Value Creation, *Competition Forum* Vol. 9(1),
- Hadadina, N., Qaqishb, M., Akawwi E., Bdour, A., (2009), *Water shortage in Jordan — Sustainable solutions*. Elsevier
- Hamel, G. and Prahalad, C. (1996), *Competing for the Future*. Harvard Business Review Press..
- Hamel, G., (2013) Why companies need to change the way they change. [Online] Available at: <http://management.fortune.cnn.com/2013/04/22/why-companies-need-to-change-the-way-they-change/> [Accessed 15 May 2013].
- Handfield, R., Sroufe, R. and Walton, S. (2005) Integrating environmental management and supply chain strategies, *Business Strategy and the Environment*, 14, 1, 1-19.
- Hannes, K. and Fjedstad. (2000), Linking Intangible Resources and Competition. *European Management Journal*, 18 (1), 52-62.
- Hart, S. L. (2005) *Capitalism at the crossroads: The unlimited business opportunities in solving the world's most difficult problems*, Wharton school publishing, New Jersey.
- Hatch M. J. and Cunliffe A. L. (2006), *Organization Theory*, Oxford University Press, 2nd Ed.
- Hayday, S. (2008) The fine line of absence management. *Strategic HR Review*, 7(2), pp. 28-33.

- Heinsman, H., de Hoogh, A. H. B., Koopman, P. L., and van Muijen, J. J. (2006). Competency management.
- Hellriegel, D. and Slocum, J. M. (2009), Organizational Behaviour. Cengage Learning.
- Heron J. (1996), Co-operative inquiry: research into the human condition, London, Sage.
- Industrial Research Institute (2010), Research management, Michigan: Industrial Research Institute.
- Hiatt, J. (2006), ADKAR: A Model for Change in Business, Government and the community. Learning Center Publications, Loveland,.
- Hind, P., Wilson, A. and Lenssen, G. (2009), “Developing leaders for sustainable business”, Corporate Governance, Vol. 9 No. 1, pp. 7-20.
- Hind, P., Wilson, A. and Lenssen, G., (2009). Developing leaders for sustainable business. Corporate Governance, 9(1), pp. 7-20.
- Hinds, M. (2003), The Triumph of the Flexible Society: The Connectivity Revolution and Resistance to Change. Greenwood Publishing Group.
- Hirschheim, R. (1988), Information Systems and User Resistance: Theory and Practice. Computer Journal, pp. 398 -408.
- HM Revenue and Customs, (2013), Notice LFT1 - A general guide to Landfill Tax July 2013 Available at: http://customs.hmrc.gov.uk/channelsPortalWebApp/channelsPortalWebApp.portal?_nfpb=true&_pageLabel=pageExcise_ShowContent&id=HMCE_CL_000509&propertyType=document#downloadopt
- HMIC (2014) Policing in Austerity, Meeting the Challenge. London: HMIC.
- HMIC (2015) PEEL: Police efficiency 2015. London: HMIC.
- Hoffman, A. J. (1993) The importance of fit between individual values and organizational culture in the greening of industry, Business Strategy and the Environment, 2, 4, 10-18.
- Hoffman, A. J. (2005) Climate change strategy: The business logic behind voluntary greenhouse gas reductions, California Management Review, 47, 3, 21-46.
- Holliday, C., Schmidheiny, S. and Watts, P. (2002) Walking the talk: The business case for sustainable development, Greenleaf publisher, Sheffield, UK.
- Holt K. and Seki K. (2012), Global Leadership: A Developmental Shift for Everyone, Industrial and Organizational Psychology, Volume 5, Issue 2, pp. 196–215.
- Höök, M., Tang, X., (2013) Depletion of fossil fuels and anthropogenic climate change—A review, Elsevier, pg 799-800
- Höök, M., Tang, X., 2013. Depletion of fossil fuels and anthropogenic climate change—A review, Elsevier, pg 799-800

- Howell, J. M., and Avolio, B. J. (1993). Transformational leadership, transactional leadership, locus of control and support for innovation: Key predictors of consolidated-business-unit performance. *Journal of Applied Psychology*, 78, 891-902.
- Hunt, D. P. (2003) The concept of knowledge and how to measure it, *Journal of Intellectual Capital*, 4, 1, 100-113.
- Huselid, M. (1995) The impact of human resource management practices on turnover, productivity and corporate financial performance, *Academy of Management Journal*, 38, 365-372.
- Hyman, J., Baldry, C., Scholarios, D. and Bunzel, D. (2003) Work life imbalance in call centres and software development, *British Journal of Industrial Relations*, 41, 2, 215-139.
- Jamasb, T., Nepal, R., (2010), Issues and options in waste management: A social cost–benefit analysis of waste-to-energy in the UK
- Jayaraman, R., Torre, D.L., Malik, T. and Pearson, Y.E. (2015) Optimal work force allocation for energy, economic and environmental sustainability in the United Arab Emirates: A goal programming approach. *Energy Procedia*, 75, pp. 2999-3006.
- Johnson, G. and Scholes, K. (2002) *Exploring corporate strategy*. Essex: Prentice-Hall.
- Joppe, M. (2000), The Research Process (in Golafshani Nahifd (2003), *Understanding Reliability and Validity in Qualitative Research*, The Qualitative Report, Volume 8, Number 4, pp. 597-607).
- Kahn, W.A. (1990) 'Psychological conditions of personal engagement and disengagement at work', *Academy of Management Journal*, Vol 33, pp692-724.
- Kantaria, A. (2015) My Telegraph [online]. [Accessed 22 November 2015]. Available at: <<http://my.telegraph.co.uk/expat/annabelkantaria/10158727/the-annual-expat-reshuffle-whos-leaving-this-year/>>.
- Kanter, R. M. (1983), *The Change Masters: Corporate Entrepreneurs at Work*. Taylor & Francis.
- Kay J. (1993), The Structure of Strategy, *Business Strategy Review*, Vol. 4, pp. 17-37.
- Kay, J. (2004) *The truth about markets: Why some nations are rich but most remain poor*, Penguin, London.
- Keohane, J. (2010), How facts backfire- Researchers discover a surprising threat to democracy: our brains. [Online] Available at: http://www.boston.com/bostonglobe/ideas/articles/2010/07/11/how_facts_backfire/
- Killen C. P., Jugdev K. and Petits Y. (2012), *International Journal of Project Management, Journal of Management Studies*, Volume 30, Issue 5, July 2012, pp. 525–538.
- Kirkup, J. (2008) Pre-budget Report: Public Spending will be Cut by \$37bn, *The Daily Telegraph*, 26 November.

- Kleindorfer R. P, Singhai K. and Van Wassenhove N. L. (2005), Sustainable Operations Management, *Production and Operations Management*, Vol. 14, issue 4, pp. 482-492.
- Kotler, P. and Lee, N. (2005) *Corporate social responsibility: Doing the most good for your company and your cause*, Hoboken and Wiley, New Jersey.
- Kotter, J. (1996) *Leading change*, Harvard Business School, Boston, MA.
- Kotter, J. P. (1996), *Leading Change*. Harvard Business Press.
- Kotter, John P. (1996) *Leading Change*, 1st Ed, Harvard Business School Publishers.
- Kuijpers, M. (2003). *Loopbaanontwikkeling. Onderzoek naar 'competenties'*. [Career development. Research regarding 'competencies'.] Unpublished PhD thesis, University of Twente, Enschede.
- Kular, S., Gatenby, M., Rees, C. and Soan, E. (2008) *Employee Engagement: A Literature Review*, Kingston University Working Paper.
- Kuntz, J. R. and Gomes, J. F., (2013) Transformational change in organisations: a self-regulation approach, *Journal of Organizational Change Management*, 25(1).
- Kyriacou, C. (2001) Teacher stress: directions for future research, *Education Review*, 53(1), pp. 27-35.
- Lau A., Tang E. and Yam R. (2010), Effects of Supplier and Customer Integration on Product Innovation and Performance: Empirical Evidence in Hong Kong Manufacturers, *Volume 27, Issue 5*, pp. 761–777.
- Lawrence, P. (1954), How to Deal with Resistance to Change. *Harvard Business Review*, pp. 49-57.
- Leonard-Barton, D. (1992) The factory as a learning laboratory, *Sloan Management Review*, Fall, 23-38.
- Leonard-Barton, D. (1992). "Core Capabilities & Core Rigidities: A Paradox in Managing New Product Development." *Strategic Management Journal* 13(special): 111-128.
- Levasseur, R.E. (2005) The impact of transforming leadership style on follower performance and satisfaction: a meta-analysis. *Dissertation Abstracts International*, 65(7), pp. 2673-2866.
- Lewin, K. (1951) *Field theory in social sciences*, Haper and Row, New York.
- Li J., Wang M. H. and Ho Y. S. (2011), Trends in research on global climate change: A Science Citation Index Expanded-based analysis, *Global and Planetary Change*, Volume 77, Issues 1–2, May 2011, Pp. 13–20.
- Liamputtong, P. and Ezzy, D. (2005) *Qualitative research methods*, Oxford University Press, South Melbourne.

- Lindley, R. M. (2002). Knowledge-based economies: the European employment debate in a new context. In M. J. Rodrigues (Ed.), *The new knowledge economy in Europe: a strategy for international competitiveness and social cohesion*. Cheltenham: Edward Elgar.
- Lodico M., Spaulding D. and Voegtle K. (2010), *Methods in educational research: From theory to practice*, San Francisco, CA: John Wiley & Sons.
- London Assembly (2013) *Smart Policing, How the Metropolitan Police Service can make better use of technology*. London: London Assembly.
- Lussier, R. N. and Achua, C. F. (2009), *Leadership: Theory, Application, & Skill Development*. Cengage Learning.
- Ma Hao (1999), Anatomy of Competitive Advantage: A SELECT Framework, *Management Decision*, Vol. 37, Issue 9, pp. 709-718.
- Maak, T. (2007), Responsible Leadership, Stakeholder Engagement, and the Emergence of Social Capital. *Journal of Business Ethics*, pp. 329 -343.
- Maak, T. and Pless, N.M. (2009), "Business leaders as citizens of the world. Advancing humanism on a global scale", *Journal of Business Ethics*, Vol. 88 No. 3, pp. 537-50.
- Martin, B. (2006), *Outdoor Leadership: Theory And Practice*, Human Kinetics.
- Matthews, J. and Shulman, A. D. (2005), Competitive advantage in public-sector organizations: explaining the public good/sustainable competitive advantage paradox. *Journal of Business Research*, pp. 232-240.
- Maurer, R. (1996), Using resistance to build support for change. *Journal for Quality & Participation*, pp. 56-63.
- Mayor, F., (1997), *Water and Civilisation*, UNESCO Courier, UNESCO press, Volume 50, issue 10
- Mcarthy, C. and Eastman, D. (2010), *Change Management strategies for an effective EMR Implementation*, Chicago: HIMSS.
- McCrudden, C. (2004) Using public procurement to achieve social outcomes, *Natural Resources Forum*, 28, 257–267.
- Mckiernan, p. (1997) Strategy past; strategy futures. *Long Range Planning*, 30(5), pp. 690-708.
- Meadows H.D., Meadows L. D., Randers J. and Behrens III W. (1972), *The Limits To Growth: A Report For The Club Of Rome's Project On The Predicament Of Mankind*, Universe Books.
- Merson, R. (2011), *Guide to Managing Growth: Strategies for Turning Success Into Even Bigger Success*. John Wiley & Sons.

- Metropolitan Police (2012) Sustainable Policing; Corporate Social Responsibility Report 2011/2012. London: Metropolitan Police Service.
- Miles, M. B. and Huberman, A. M. (1994) *Qualitative data analysis: An expanded sourcebook*, Sage, London.
- Millar, C., Hind, P. and Magala, S. (2012), Sustainability and the need for change: organisational change and transformational vision. *Journal of Organizational Change Management* , 25(4).
- Miller, D. (2002), Successful change leaders: what makes them? What do they do that is different?. *Journal of Change Management*, Volume 4, pp. 359-368.
- Mintzberg, H., Quinn, J.B. and Choshal, S. (1995) *The strategy process: Concepts, contexts and cases*. NJ: Prentice-Hall.
- Mohrman S. and Lawler E. (2012), *Generating Knowledge That Drives Change*, *Academy of Management Perspectives*, vol. 26, no. 1, pp. 41-51.
- Mooney, A., (2007), Core Competence, Distinctive Competence, and Competitive Advantage: What Is the Difference?, *Journal of Education for Business*, Heldref Publications, pp 110-114
- Moran, J. W. and Brightman, B. K. (2001) 'Leading organizational change', *Career Development International* ,6(2), pp. 111–118.
- Morimoto, R. (2010) Estimating the benefits of effectively and proactively maintaining infrastructure with the innovative smart infrastructure sensor system. *Socio-Economic Planning Sciences*, 44, pp. 247-257.
- Murray, P., Poole, D. and Jones, G. (2006), *Contemporary Issues in Management and Organisational Behaviour*. Cengage Learning Australia.
- Nader, S. (2009) Paths to a low-carbon economy – the Masdar example. *Energy Procedia*, 1, pp. 3951-3958.
- Nadler, D. (1993), *Concept for the management of organisational change*. Paul chapman publishing.
- Neyroud, P. (2010) Protecting the Front Line: The Recessionary Dilemma. *Journal of Policy and Practice*, 4(1), pp. 1-3.
- Ng, P.T. and Ang, H.S. (2011) Integrating quality and innovation: the case of the Singapore Police Force. *International Journal of Quality and Innovation*, 1(3), pp. 237-250.
- Nicholson, W. M. (2009), *Leadership Practices, Organizational Commitment, and Turnover Intentions: A Correlational Study in a Call Center*, ProQuest.
- Nidumolu Ram, Prahalad C. K. and Rangeswami M. R (2009), Why Sustainability is Now the Key Driver of Innovation, *The Magazine*, Harvard Business Review.

- Nuami, M. (2011), *Change Management from a Practical Perspective*. 2 ed. Abu Dhabi: Centre of Research and Security Studies.
- Nybo, G. (2004). *Personnel development for dissolving jobs: towards a competency-based approach*.
- O'Reilly CA, Caldwell DF, Chatman J. (2005), *How leadership matters: the effects of leadership alignment on strategic execution*. Research Paper Series No. 1895 Stanford Graduate School of Business.
- O'Toole, J. (1995), *Leading Change: Overcoming the Ideology of Comfort and the Tyranny of Custom*. San Francisco, CA: Jossey-Bass.
- Oberheitmann, A. (2011) *Economic Growth and a Low Carbon Economy*. *Low Carbon Economy*, 2(4), pp. 200-204.
- Oberheitmann, A. (2013) *Some Remarks on the Individual Contribution to Climate Change*. *American Journal of Climate Change*, 2, pp. 198-202.
- OECD (2003) *The environmental performance of public procurement: Issues of policy coherence*, Organisation for Economic Cooperation and Development, Paris.
- Ogilvie, J. and Stork, D. (2003), *Starting the HR and change conversation with history*. *Journal of organisational change management*, 16(3), pp. 254-271.
- Ostroff Cheri (2012), *Perspectives on Organizational Fit*, Psychology Press.
- Oxtoby, B., Mc Guinness, T. and Morgan, R. (2002), *Developing Organisational Change Capability*. *European Management Journal*, 20(3), pp. 310-320.
- Parahoo K. (1997), *Nursing Research: Principles, Process, Issues*, London, Macmillan.
- Parker L. D. (2012), *Qualitative management accounting research: Assessing deliverables and relevance*, *Critical Perspectives on Accounting*, Volume 23, Issue 1, pp. 54–70.
- Pasmore, W. A., Woodman, R. W. and Abraham B., S. (2010), *Research in Organizational Change and Development*, Emerald Group Publishing, Volume 18.
- Paton, R. A. and McCalman, J. (2008), *Change Management: A Guide to Effective Implementation*. SAGE Publications Ltd.
- Pavitt, K. (1991), *Key Characteristics of the Large Innovating Firm*. *British Journal of Management* 2: 41-50.
- Pelissier R. (2008), *Business Research Made Easy*, Juta and Co.
- Penna (2007). *Meaning at Work Research Report*. [Online] Available: [http:// www. e-penna.com/ news opinion /research.aspx](http://www.e-penna.com/news_opinion/research.aspx) (November10, 2008).
- Perkins, S. and Arvinen-Muondo, R., (2013) *Organizational Behaviour*. s.l.:Kogan Page.

- Peteraf, M. (1993). The cornerstones of competitive advantage: A resource-based view. *Strategic Management Journal*, 13, 363-380.
- Peters and Waterman (1982), *In Search of Excellence*, Harper & Row.
- Peters, T. (1988), *Thriving on Chaos: Handbook for a Management Revolution*. Harper Collins.
- Polit D.F., Beck C.T., Hungler B.P. (2001), *Essentials of Nursing Research: Methods, Appraisal, and Utilisation*, Philadelphia, Lippincott, 5th Ed.
- Porter E. Michael E. and Kramer R. Mark (2011), Creating Shared Value: How to reinvent capitalism—and unleash a wave of innovation and growth, *Harvard Business Review*, January–February, pp. 2-17.
- Porter M. E. (1985), *Competitive Advantage*, The Free Press (N.Y).
- Porter M. E. (1998), Clusters and the New Economics of Competition, *HBR*, November – December, pp. 77-90.
- Porter, M. E. (1991) Towards a dynamic theory of strategy, *Strategic Management Journal*, 12, 95-117.
- Porter, M. E. and Kramer, M. R. (2002) The competitive advantage of corporate philanthropy, *Harvard business review*, 80, 12, 56-68.
- Porter, M. E. and Kramer, M. R. (2006) Strategy and society: The link between competitive advantage and corporate social responsibility, *Harvard business review*, December, 1-14.
- Porter, M. E. and Reinhardt, F., L., (2007) A strategic approach to climate, *Harvard Business Review*, October, 22-26.
- Porter, M. E., (1991), America's green strategy, *Scientific American*, 264(4), 168.
- Porter, M. E., (2008), *On competition*. Cambridge, MA: Harvard Business Press
- Porter, M.E., (1985), *Competitive Advantage*, Free Press, New York, 1985
- Porter, M.E., (1991), Towards a dynamic theory of strategy, *Strategic Management Journal*, pp. 95-117
- Prahalad C. K. and Hamel G. (1990), The Core Competence of the Corporation, May-June, pp. 79-90.
- Prahalad, C. K. (2005) *The fortune at the bottom of the pyramid*, Wharton School Publishing, Upper Saddle River, NJ.
- Prahalad, C.K. and Hamel, G. (1990) The core competence of the corporation. *Harvard Business Review*, 68(3), pp. 79-81.

- Prajogo D., Tang A. and Lai K. H. (2012), Do firms get what they want from ISO 14001 adoption?: an Australian perspective, *Journal of Cleaner Production*, Volume 33, September 2012, pp. 117–126.
- Priem R., Li S. and carr J. (2012), Insights and New Directions from Demand-Side Approaches to Technology Innovation, Entrepreneurship, and Strategic Management Research, *Journal of Management*, vol. 38, No. 1, pp. 346-374.
- Proctor J. Allen (2010a), *More than Just Money: Practical and Provocative Steps to Nonprofit Services*, LLM Press.
- Proctor J. Allen (2010b), *Linking Mission to Money: Finance for Nonprofit Leaders*, LMM Press.
- Pugh, D. (1993), *Understanding and managing organisational change*. Paul Chapman publishing Ltd.
- Radhi, H. (2010) On the Effect of Global Warming and the UAE Built Environment. In Harris, S.A. *Global Warming*. Sciyo, pp. 272-978.
- Rake, M., Grayson, D., (2008), *Embedding corporate responsibility and sustainability – Everybody's business*, Corporate Governance, Emerald Group Publishing Limited, pp. 395-399
- Randall, J. (2004), *Managing Change/Changing Managers*. Routledge.
- Rapp J. K., Bernardi, R. A. and Bosco, S. M. (2011), Examining The Use of Hofstede's Uncertainty Avoidance Construct in International Research: A 25-Year Review. *International Business Research*, 4(1).
- Reichert, ., F. M., (2011) Technological Capability's Predictor Variables. *Journal of Technology Management and Innovation*, 6(1).
- Reinhardt, R., Bornemann, M. Pawlowsky, P. and Schneider, U. (2003). *Intellectual Capital and Knowledge Management: Perspectives on Measuring Knowledge*.
- Remenyi D., Williams B., Money A. and Swartz E. (1998), *Doing Research in Business and Management: An Introduction to Process and Method*, London, Sage.
- Renukappa, S., Egbu, C., Akintoye, A., and Goulding, J., (2012) A critical reflection on sustainability within the UK industrial sectors, *Construction Innovation: Information, Process, Management*, 12(3), 317 – 334.
- Renukappa, S., Egbu, C., Akintoye, A., Suresh, S., (2014), Drivers for Embedding Sustainability Initiatives within Selected UK industrial Sectors, *Journal of International Real Estate and Construction Studies*, Vol. 3 No.1, pp 1-22
- Ridgeway, C. and Wallace, B. (1996), *Leadership and Strategic Change*. Routledge.
- Roarty M. (1997) Greening business in a market economy. *European Business Review* 97(5): 244–254.

- Robins, N., Singh, S., Clover, R., Knight, Z., Magness, J., (2010) Sizing the Climate Economy. September 2010. HSBC Global Research, New York.
- Rodda, J. C., (2006), Sustaining Water Resources in South East England, Royal Meteorology Society, Wiley Interscience
- Rodriguez Melo, A., Mansouri, S.A., (2011), Stakeholder Engagement: Defining Strategic Advantage for Sustainable Construction, Business Strategy and the Environment, John Wiley & Sons
- Rodwell, J., Lam, J. and Fastenau, M. (2000) Benchmarking HRM: best practices from outside the square in the Australian finance industry, *Employee Relations*, 22, 356-374.
- Rondinelli, D. A. and Berry, M. A. (2000) Environmental citizenship in multinational corporations: Social responsibility and sustainable development, *European Management Journal*, 18, 1, 70-84.
- Rubin A. and Babbie E. (Eds.), (2008), Research methods for social work, Belmont, CA: Thomson. 6th Ed.
- Rugman, A. and Verbeke, A. (2002). Edith's Penrose's Contribution to the Resource-Based View of Strategic Management. *Strategic Management Journal*, 23, 769-780.
- Rus, C.L., Vonas, G. and Baban, A. (2012) An analysis of environmental changes, resources and performance: an internal police organisation perspective. *Procedia Social and Behavioural Sciences*, 33, pp. 727-731.
- Sarver, M.B. and Miller, H. (2014) Police chief leadership: styles and effectiveness. *An International Journal of Police Strategies & Management*, 37(1), pp. 126-143.
- Saunders Mark N. K., Lewis Philip and Thornhill Adrian (2012), Research Methods for Business Students, Financial Times Prentice Hall, 6th Ed.
- Savitz, A. W. and Weber, K. (2006) The triple bottom line, Jossey-Bass, San Francisco, CA.
- Schein, E. (1985). *Organizational Culture and Leadership*. San-Francisco: JosseyBass.
- Schienstock, G. (2009), Organizational capabilities : some reflections on the concept, Research Unit for Technology, Science and Innovation Studies (TaSTI).
- Schmidheiney, S. (1992) Changing course: A global business perspective on development and the environment, MIT press, Cambridge.
- Schmidt, G. and Jackson, L. (2005). Managing paradoxes in change: Six steps for building a balanced culture. The Conference Board-Executive Action Series, No. 162.
- Senge, P. (1990) The fifth discipline: The art and practice of the learning organisation, Century Business, London.
- Senge, P. (1990). The Fifth Discipline – The Art and Practice of The Learning Organization. New York: Doublebay.

- Sharma, S. and Ruud, A. (2003) On the path to sustainability: Integrating social dimensions into the research and practice of environmental management, *Business Strategy and the Environment*, 12, 205-214.
- Shaw, K. (2005), An engagement strategy process for communicators. *Strategic Communication Management*, 9(3), pp. 26-29.
- Shriberg, A. (2010), *Practicing Leadership Principles and Applications*. John Wiley and Sons.
- Sisaye, S. (2001), *Organizational Change and Development in Management Control Systems: Process Innovation for Internal Auditing and Management Accounting*. Emerald Group Publishing.
- Sourani, A., Sohail, M., (2012), Barriers to addressing sustainable construction in public Procurement strategies, *ICE*, Volume 164 Issue ES4
- St.Claire, P., (2013). *Drivers for change & the business case for corporate* , Sydney: s.n.
- Staniskis, J. K. and Stasiskiene, Z. (2005) Industrial waste minimization – experience from Lithuania, *Waste management and research*, 23, 282-290.
- Stevenson A. (2010), *New Oxford American Dictionary*, Third Edition, USA.
- Stevenson H. H.' Jarrillo-Mossi J. C. (1986), Preserving Entrepreneurship as Companies Grow, *Journal of Business Strategy*, Vol. 7, Issue: 1, pp.10 – 23.
- Stogdill, R. M. (1974). *Handbook for leadership*. New York: Free Press, 43-44.
- Stoner, J., Yetton, P. and Creig, J. (1994), *Management*. Prentice Hall.
- Strategic Direction, (2012), Destination sustainability - The Acciona route, Vol. 28 No. 4, Emerald Group Publishing Limited, pp. 12-14
- Susman, G., Jensen, K. and Michael, J. (2006), *Innovation and change management in small and medium sized Manufacturing companies*, Smeal College of Business ,The Pennsylvania State University.
- Tam, V.W.Y., (2008) On the effectiveness in implementing a waste-management plan method in construction. *Waste Management* 28 (6), 1072–1080.
- Teece D. J. (2012), Dynamic Capabilities: Routines versus Entrepreneurial Action, *Journal of Management Studies*, Volume 49, Issue 8, pages 1395–1401, December 2012.
- Teece, D. J., G. Pisano, et al. (1998). *Dynamic Capabilities and Strategic Management. Strategy, Technology and Public Policy: The Selected Papers of David J. Teece*. D. J. Teece. Cheltenham, Edward Elgar. 2.
- Teece, D., Pisano, G. and Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18 (7), 509-534.
- Themelis, N. J. and Ulloa P. A., (2007), Methane generation in landfills, *Earth Engineering Center and Department of Earth and Environmental Engineering*, pp 1244

- Thomilson B. (2001), Descriptive Studies. In B.Thyer (Ed.), The handbook of social work research methods (pp. 131-141). Thousand Oaks, CA Sage.
- Thompson, F. M. (2010), Strategic management. Cengage Learning EMEA.
- Todnem R. (2005), Organisational Change Management: A Critical Review. Journal of Change Management , 5(4), pp. 369-380.
- Torrington, D. and Weightman, J. (1987), Middle management work. Journal of General management , 13(74-89).
- Tozer, J. (2012), Leading Through Leaders: Driving Strategy, Execution and Change. Kogan Page Publishers, .
- Truss C., Soane E. and Edwards C. (2006) Working life: employee attitudes and engagement. Research report. London: Chartered Institute of Personnel and Development.
- Tucker, B. A., and Russell, R. F. (2004). The influence of the transformational leader. Journal of Leadership &Organizational Studies, 10(4), 103-111.
- U.S. Energy Information Administration (2013) Annual Energy Outlook 2013 with Projections to 2040, Office of Integrated and International Energy Analysis, U.S. Department of Energy, Washington, DC.
- UAE Ministry of Energy (2015) UAE State of Energy Report 2015. UAE: Ministry of Energy.
- UAEinteract (2015) Information literacy: a definition [online]. Dubai: UAEinteract. [Accessed 12 October 2015]. Available at: <<http://www.uaeinteract.com/docs/Now-pay-Dubai-Police-fines-at-kiosks/71599.htm>>.
- Ulrich, D. (1990), Organizational Capability: Competing from the Inside Out. John Wiley & Sons.
- Ulrich, D. and Lake, D. (1991), Organisational capability; creating competitive advantage, Academy of Management Executive, 5(1).
- Umemoto, K. (2002). Managing Existing Knowledge Is Not Enough. In Choo and Bontis (Eds.) The Strategic Management of Intellectual Capital and Organizational Knowledge, New York: Oxford University Press, 463-476.
- UNEP, (2008), Vital water Graphics – An Overview of the State of the Worlds Fresh and Marine Waters – 2nd Edition
- Vaccaro I. G., Jansen J., Van Den Bosch F. A. and Volberda H. W. (2012), Management Innovation and Leadership: The Moderating Role of Organizational Size, Journal of Management Studies, Volume 49, Issue 1, pp. 28–51.
- van Teijlingen, E., Hundley, V. (2001) The importance of pilot studies. Social Research Update, 35.

- Vance, R. J. (2006), Employee Engagement and Commitment , SHRM Foundation's Effective Practice Guidelines.
- Volberda, H. (1996). Toward the flexible form: how to remain vital in the hypercompetitive environments. *Organization Science*, 7, 359-374.
- Vos, A. D., Hauw, S. D. and Willemse, I. (2011), Competency Development In Organizations: Building An Integrative Model Through A Qualitative Study, Vlerick Leuven Gent Management School.
- Waddell, H., (2008), Sustainable construction and UK legislation and policy, *ICE, Management, Procurement and Law* 161 Issue MP3, pp. 127-132
- Waddock, S. and Smith, N. (2000) Relationships: The real challenge of corporate global citizenship, *Business and Society Review*, 105, 1, 47–62.
- Wang L. C., Ahmed P (2007), Dynamic capabilities: A review and research agenda, *International Journal of Management Reviews*, Volume 9, Issue 1, pages 31–51.
- Wang, J., Chameidides, B., (2005) Global Warming's Increasingly Visible Impacts, *Environmental Defence*,
- Watson, T. J. (2001) *In Search of Management: Culture, Chaos and Control in Managerial Work*. Cengage Learning EMEA.
- WBCSD (2000) *Eco-efficiency: Creating more value with less impact*, World Business Council for Sustainable Development, Geneva.
- Weber, E. U. and Hsee, C. K. (1998) Cross-cultural differences in risk perception, but cross-cultural similarities in attitude towards perceived risk, *Management Science*, London.
- Welford, R. (1997) *Hijacking environmentalism: Corporate responses to sustainable development*, Earthscan Publications, London.
- White Jay D. (1999), *Taking Language Seriously: The Narrative Foundations of Public Administration Research*, Washington, DC: Georgetown University Press.
- White, M., Hill, S., McGovern, P., Mills, C. and Smeaton, D. (2003) High-performance' management practices, working hours and work-life balance, *British Journal of Industrial Relations*, 4, 175–195.
- Williams, R. J. and Barrett, J. D. (2000) Corporate philanthropy, criminal activity, and firm reputation: is there a link?, *Journal of Business Ethics*, 26, 341-350.
- Wilson J. (2010) *Essentials of Business Research: A Guide to Doing Your Research Project*, London, Sage Publications.
- Winter G. (2000), A comparative discussion of the notion of validity in qualitative and quantitative research. *The Qualitative Report*, 4(3&4) (in Golafshani Nahifd (2003), *Understanding Reliability and Validity in Qualitative Research*, *The Qualitative Report*, 8(4), 597-607.

- Winter, S. (2003) Understanding Dynamic Capabilities, *Strategic Management Journal*, 24, 991-995.
- Winter, S. and Szulanski, G. (2002) Replication of Organizational Routines: Conceptualizing the Exploitation of Knowledge Assets, In Choo and Bontis (Eds.) *The Strategic Management of Intellectual Capital and Organizational Knowledge*, New York: Oxford University Press, 207-221.
- Wodak, R, Kwon, W and Clarke, I., (2011) Getting people on board: Discursive leadership for consensus building in team meetings, *Discourse and Society*, 22(5), 592-644.
- Yegidis B. L. and Weinbach R. W. (2002) *Research Methods for Social Workers*, University of Michigan, UAS.
- Yongtae Kim, Myung Seok Park, and Benson Wier (2012) Is Earnings Quality Associated with Corporate Social Responsibility?. *The Accounting Review*, 87(3), 761-796.
- Yukl, G. (1999) An Evaluation of Conceptual Weaknesses in Transformational and Charismatic Leadership Theories, *The Leadership Quarterly*, 10, 285-305.
- Yukl, G. (2003) Tridimensional leadership theory: A roadmap for flexible, adaptive leaders. En R. J. Burke & C. Cooper (Eds.), *Leading in turbulent times* (pp. 75-92). London: Blackwell.
- Zabihi, H., Habib, F., and Mirsaeedie, L., (2012) *Sustainability in Building and Construction: Revising Definitions and Concepts*, London: Blackwell.
- Zbar, V. (1994), *Managing The Future*, Universities Press India, New Delhi.
- Zimmermann, N. (2011) *Dynamics of Drivers of Organizational Change*, Springer, London, UK.

APPENDIX A: PROTOCOL FOR SEMI-STRUCTURED INTERVIEWS

A STRATEGIC FRAMEWORK FOR MANAGING TRANSFORMATIONAL CHANGE TOWARDS SUSTAINABILITY

SEMI-STRUCTURED INTERVIEW QUESTIONS

Date	
Time of interview	
Department	

	Name of Interviewee
	Position of Interviewee
	Department total employee size
	Please kindly tell me a little about what your current job role is in the organisation?	
	<ul style="list-style-type: none"> Given your role in this organisation, please explain what does “sustainability” mean to you and your organisation? 	
	<ul style="list-style-type: none"> Can you describe the key drivers that have fuelled the need for implementing sustainability initiatives in your organisation? 	
	<i>The next few questions will focus on key sustainability initiatives that have been implemented or planning to implement in your organisation in the next 5 years.</i>	
	From the job role and responsibilities that you perform in this organisation, please, describe key ‘sustainability initiatives’ that are currently being implemented in your organisation	
	<i>The discussions have been very interesting. The next few questions will focus on main challenges organisations face in implementing key sustainability initiative.</i>	
	<ul style="list-style-type: none"> From the job role and responsibilities that you perform in this organisation, please, enlighten me on the main challenges your organisation face in implementing sustainability initiatives? 	
	<i>The next few questions will focus on the impact of key sustainability initiatives on organisational competitiveness.</i>	
	<ul style="list-style-type: none"> Given your job roles and responsibility, kindly explain how the efforts of sustainability initiatives have contributed to your organisation’s competitiveness? In your view is there a need for developing “a strategic framework for managing transformational change towards sustainability”. 	

Thank you for your views on the above questions. I would also like to thank you for the time you have dedicated to this research. If you are interested to know the outcome of this research, it would be my pleasure to share it with you.

APPENDIX B: VALIDATION INTERVIEW PROTOCOL

Dear Sir/Madam

Re: A strategic framework for managing transformational change towards sustainability

I am a PhD student at the University of Wolverhampton, U.K. and currently conducting an interview to validate a research framework titled as above. The aim of this validation interview is to refine and validate a strategic framework sustainability management framework in terms of clarity, information flow and contents in terms of generic and detailed components. The proposed framework is a part of doctoral research study that sought to develop a strategic framework for managing transformational change towards sustainability. The proposed framework is based on the findings of literature review and 60 interviews with directors, department heads, managers, and sustainability consultants from the public sector organisation.

This interview aims to gather your responses which will help the researcher to validate the framework that will subsequently be applied for the effective implementation of sustainability strategies in the Abu Dhabi public sector organisation. This cannot be effectively developed without your participation; therefore, you are requested to participate in the interview. This interview is estimated to take about 15 minutes.

In order to protect your confidentiality, privacy, dignity and anonymity, your answers will be attached with a unique code that will only be understood and accessed by the researcher. This will be stored in a password-protected computer that only the researcher has access to. Finally, any data provided by you will be destroyed once the degree is achieved. The project has ethical approval for the study protocol from the University of Wolverhampton, which provides further assurance.

If you have further questions about your participation, please contact me or my supervisor using the details below.

Thank you in advance for your help in conducting this research and I am looking forward to seeing you at the validation interview.

With best regards

Ahmed Al Shebli
University of Wolverhampton
Wulfruna Street, Wolverhampton.
England, WV1 1LY

Interview guide for validating a strategic framework for managing transformational change towards sustainability

Purpose of the interviews:

The interview seeks to validate the developed framework for managing transformational change towards sustainability in Abu Dhabi public sector organisation.

Respondent details:

- Name:
- Background:.....
- Position / Area of expertise:
- Organisation:
- Date:

Evaluation of the proposed framework:

1. What is your opinion on the level of completeness in terms of the overall contents of the proposed framework?
2. What is your opinion on the level of completeness in terms of the logic (i.e. flow/ sequence within the framework and how it mirrors what should be done) used within the proposed framework?
3. What is your opinion on the issues covered within the developed strategic framework?
4. What is your opinion on the level of understanding of the proposed framework?
5. Do you have further comments/suggestions regarding any areas that need to be improved/included/deleted within the proposed framework?
6. Would you recommend the framework for use by public sector organisations in the UAE?